

Grizzly ***Industrial, Inc.***®

MODEL G0779 **HEAVY-DUTY FLOOR MODEL** **GEARHEAD DRILL PRESS** **OWNER'S MANUAL** *(For models manufactured since 09/14)*



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**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE
OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.**
#WK17370 PRINTED IN CHINA

V1.05.15



WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.

Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.

The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.



WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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INTRODUCTION

Contact Info

We stand behind our machines! If you have questions or need help, contact us with the information below. Before contacting, make sure you get the **serial number** and **manufacture date** from the machine ID label. This will help us help you faster.

Grizzly Technical Support
1203 Lycoming Mall Circle
Muncy, PA 17756
Phone: (570) 546-9663
Email: techsupport@grizzly.com

We want your feedback on this manual. What did you like about it? Where could it be improved? Please take a few minutes to give us feedback.

Grizzly Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com


Manual Accuracy

We are proud to provide a high-quality owner's manual with your new machine!

We made every effort to be exact with the instructions, specifications, drawings, and photographs in this manual. Sometimes we make mistakes, but our policy of continuous improvement also means that **sometimes the machine you receive is slightly different than shown in the manual.**

If you find this to be the case, and the difference between the manual and machine leaves you confused or unsure about something, check our website for an updated version. We post current manuals and manual updates for free on our website at www.grizzly.com.

Alternatively, you can call our Technical Support for help. Before calling, make sure you write down the **Manufacture Date** and **Serial Number** from the machine ID label (see below). This information is required for us to provide proper tech support, and it helps us determine if updated documentation is available for your machine.

		MODEL GXXXX MACHINE NAME	
SPECIFICATIONS		▲ WARNING!	
Motor:	To reduce risk of serious injury when using this machine:		
Specification:	Read manual before operation.		
Specification:	Wear safety glasses and respirator.		
Specification:	Ensure safety is correctly adjusted/setup and		
Specification:	power is connected to grounded circuit before starting.		
Weight:	4. Make sure the motor has stopped and disconnect		
	power before adjustments, maintenance, or service.		
	5. DO NOT expose to rain or dampness.		
	6. DO NOT modify this machine in any way.		
	7.		
	8.		
	9. Do not use while impaired by drugs or alcohol.		
	10. Maintain machine carefully to prevent accidents.		
Manufactured for Grizzly in Taiwan			

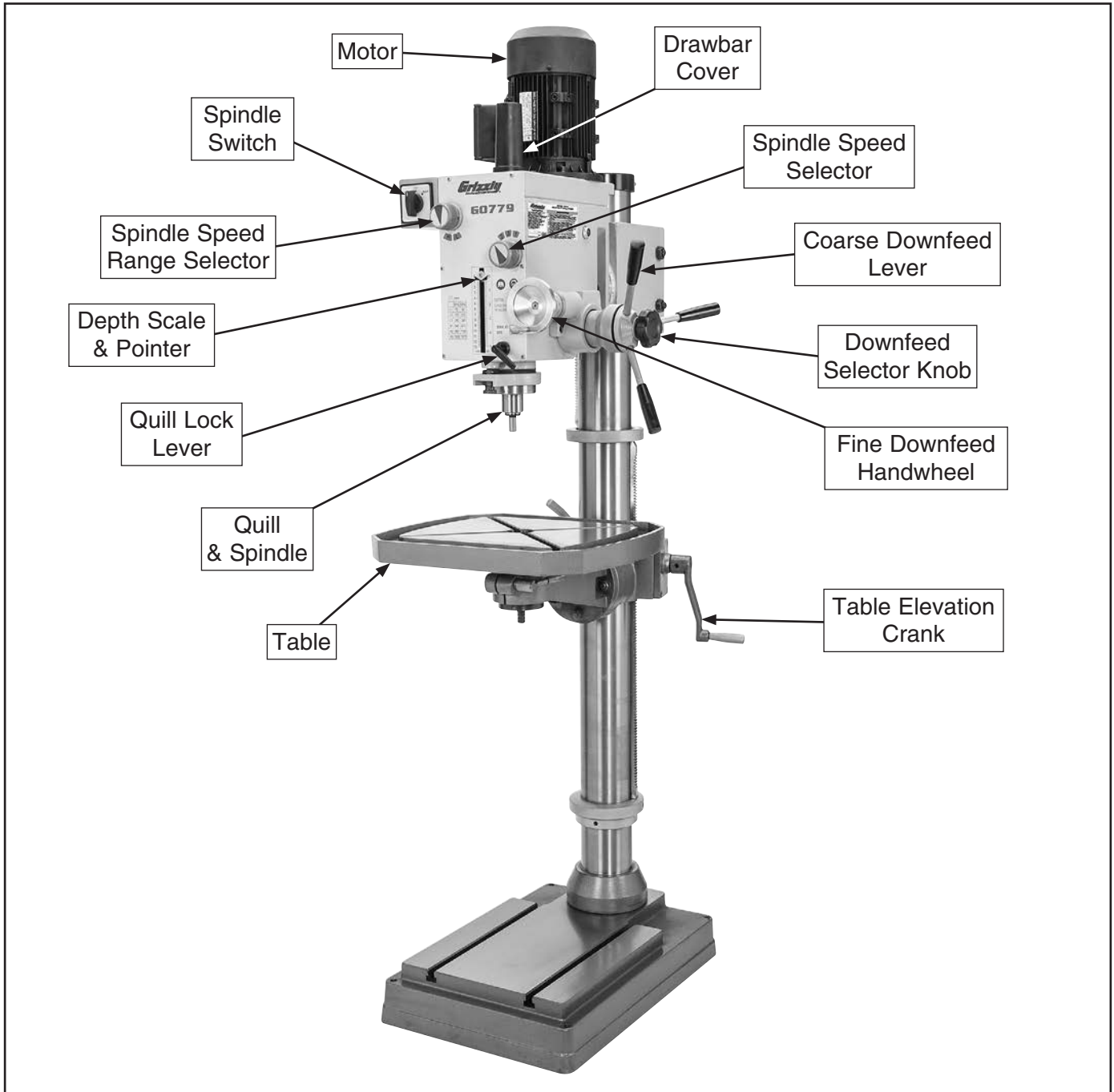
Manufacture Date

Serial Number



Identification

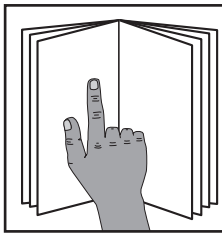
Become familiar with the names and locations of the controls and features shown below to better understand the instructions in this manual.



	<p>⚠ WARNING To reduce your risk of serious injury, read this entire manual BEFORE using machine.</p>
---	---



Controls & Components



WARNING

To reduce your risk of serious injury, read this entire manual **BEFORE** using machine.

Refer to **Figures 1–3** and the following descriptions to become familiar with the basic controls of this machine.

Headstock

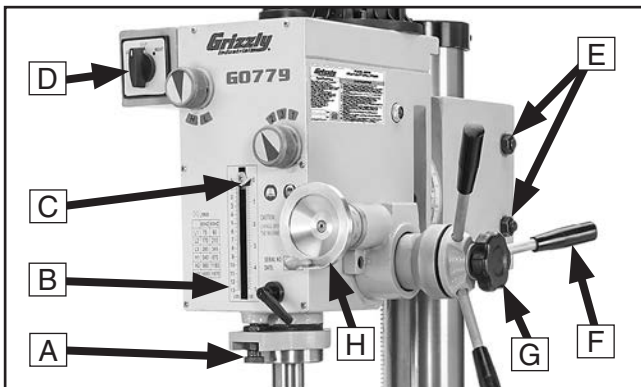


Figure 1. Headstock controls (right).

- A. Depth Stop Adjustment Knob:** Determines depth of cut.
- B. Depth Scale:** Indicates depth of cut.
- C. Depth Stop:** Stops spindle travel at pre-determined depth.
- D. Spindle Switch:** Turns machine **ON** and **OFF**. Selects direction of spindle rotation.
- E. Headstock Locking Nuts:** Lock headstock in position.
- F. Coarse Downfeed Levers:** Provide coarse control over vertical spindle travel.
- G. Downfeed Selector Knob:** Engages/disengages fine downfeed handwheel.
- H. Fine Downfeed Handwheel:** Provides fine control over vertical spindle travel.

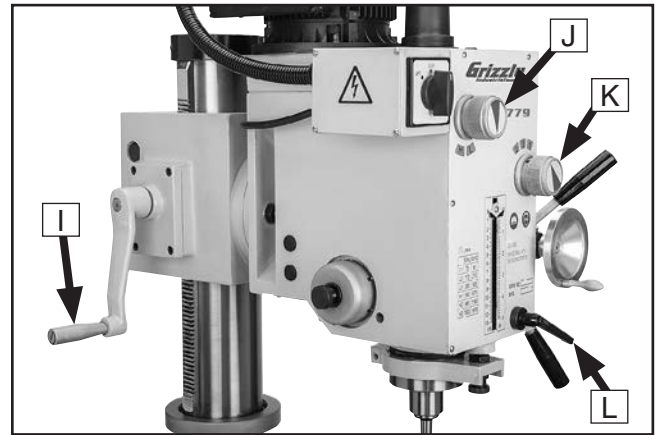


Figure 2. Headstock controls (left).

- I. Headstock Elevation Crank:** Changes elevation of entire headstock.
- J. Spindle Speed Range Selector:** Selects between low and high spindle speed ranges.
- K. Spindle Speed Selector:** Selects one of three spindle speeds within each range.
- L. Quill Lock:** Locks quill in position.

Table

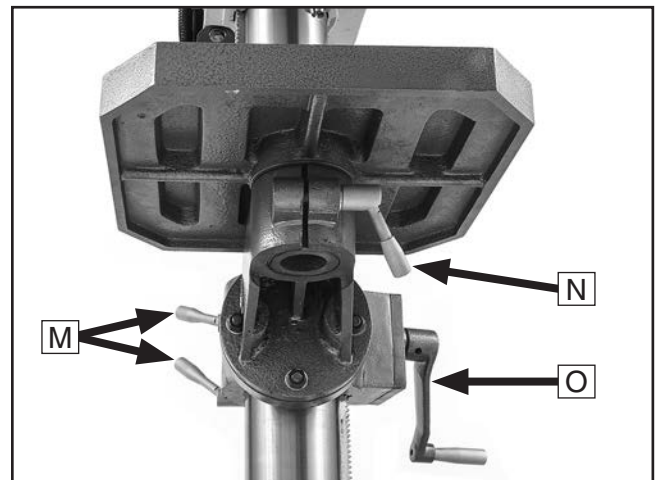


Figure 3. Table controls.

- M. Table Elevation Lock Handles:** Secure table assembly to column. Unlock to raise or lower table, or to pivot table assembly around column.
- N. Table Rotation Lock Handle:** Allows table to rotate.
- O. Table Elevation Crank:** Changes elevation of table assembly.





MACHINE DATA SHEET

Customer Service #: (570) 546-9663 · To Order Call: (800) 523-4777 · Fax #: (800) 438-5901

MODEL G0779 HEAVY-DUTY FLOOR MODEL GEARHEAD DRILL PRESS

Product Dimensions:

Weight..... 706 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 25 x 33 x 80 in.
Footprint (Length x Width)..... 26 x 18 in.

Shipping Dimensions:

Type..... Wood Crate
Content..... Machine
Weight..... 786 lbs.
Length x Width x Height..... 29 x 30 x 72 in.

Electrical:

Power Requirement..... 220V, Single-Phase, 60Hz
Full-Load Current Rating..... 8.6A
Minimum Circuit Size..... 15A
Connection Type..... Cord & Plug
Power Cord Included..... Yes
Power Cord Length..... 6-1/2 ft.
Power Cord Gauge..... 14 AWG
Plug Included..... Yes
Included Plug Type..... 6-15
Switch Type..... Forward/Reverse

Motors:

Main

Type..... TEFC Capacitor-Start Induction
Horsepower..... 2 HP
Phase..... Single-Phase
Amps..... 8.6A
Speed..... 1720 RPM
Power Transfer..... Gear Drive
Bearings..... Shielded & Permanently Lubricated

Main Specifications:

Operation Information

Swing..... 23-3/8 in.
Drilling Capacity (Mild Steel)..... 1-1/4 in.
Number of Spindle Speeds..... 6
Range of Spindle Speeds..... 90 – 1970 RPM
Drill Chuck Type..... B16
Drill Chuck Size..... 1 – 13 mm

Head Information

Max Head Tilt (Left/Right)..... 90 deg.
Maximum Movement of Head Casting..... 10-1/2 in.
Head Swivel..... 360 deg.



Spindle Information

Spindle Taper.....	R-8
Spindle Travel.....	5 in.
Distance From Spindle To Column.....	11-11/16 in.
Distance From Spindle To Table.....	26-1/2 in.
Distance From Spindle To Base.....	44-3/16 in.

Table Information

Table Length.....	19-5/8 in.
Table Width.....	18 in.
Table Thickness.....	1-3/4 in.
Floor To Table Height.....	22-15/16 in.
Vertical Table Movement.....	24-3/8 in.
Max Table Tilt (Left/Right).....	60 deg.
Table Swivel Around Center.....	360 deg.
Table Swivel Around Column.....	360 deg.
Maximum Movement Of Work Table.....	24-3/8 in.
Number of T Slots.....	2
T Slot Width.....	9/16 in.
T Slot Length.....	18-1/2 in.

Construction

Table.....	Cast Iron
Spindle Housing.....	Cast Iron
Column.....	Cast Iron
Head.....	Cast Iron
Base.....	Cast Iron
Paint Type/Finish.....	Enamel

Other Related Information

Base Length.....	25-9/16 in.
Base Width.....	17-3/4 in.
Quill Diameter.....	2-15/16 in.
Column Diameter.....	4-1/2 in.

Other Specifications:

Country of Origin	China
Warranty	1 Year
Approximate Assembly & Setup Time	1 Hour
Serial Number Location	Machine ID Label
ISO 9001 Factory	Yes
CSA, ETL, or UL Certified/Listed	No

Features:

- 90 degree left, 90 degree right head tilt
- R-8 spindle
- 5" spindle stroke
- 60 degree left, 60 degree right table tilt
- 23-3/8" swing
- 6 speeds
- 2 HP motor
- Table equipped with lock levers
- Crank handle operated rack-and-pinion vertical table and head casting movement
- Drawbar thread size: 7/16-20; length: 17-3/4"




SECTION 1: SAFETY

For Your Own Safety, Read Instruction Manual Before Operating This Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures. Always use common sense and good judgment.

 **DANGER** Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.

 **WARNING** Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

 **CAUTION** Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE This symbol is used to alert the user to useful information about proper operation of the machine.

Safety Instructions for Machinery

WARNING

OWNER'S MANUAL. Read and understand this owner's manual **BEFORE** using machine.

TRAINED OPERATORS ONLY. Untrained operators have a higher risk of being hurt or killed. Only allow trained/supervised people to use this machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof!

DANGEROUS ENVIRONMENTS. Do not use machinery in areas that are wet, cluttered, or have poor lighting. Operating machinery in these areas greatly increases the risk of accidents and injury.

MENTAL ALERTNESS REQUIRED. Full mental alertness is required for safe operation of machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

ELECTRICAL EQUIPMENT INJURY RISKS. You can be shocked, burned, or killed by touching live electrical components or improperly grounded machinery. To reduce this risk, only allow qualified service personnel to do electrical installation or repair work, and always disconnect power before accessing or exposing electrical equipment.

DISCONNECT POWER FIRST. Always disconnect machine from power supply **BEFORE** making adjustments, changing tooling, or servicing machine. This prevents an injury risk from unintended startup or contact with live electrical components.

EYE PROTECTION. Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are **NOT** approved safety glasses.



WARNING

WEARING PROPER APPAREL. Do not wear clothing, apparel or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to reduce risk of slipping and losing control or accidentally contacting cutting tool or moving parts.

HAZARDOUS DUST. Dust created by machinery operations may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material. Always wear a NIOSH-approved respirator to reduce your risk.

HEARING PROTECTION. Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

REMOVE ADJUSTING TOOLS. Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting!

USE CORRECT TOOL FOR THE JOB. Only use this tool for its intended purpose—do not force it or an attachment to do a job for which it was not designed. Never make unapproved modifications—modifying tool or using it differently than intended may result in malfunction or mechanical failure that can lead to personal injury or death!

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

CHILDREN & BYSTANDERS. Keep children and bystanders at a safe distance from the work area. Stop using machine if they become a distraction.

GUARDS & COVERS. Guards and covers reduce accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly **BEFORE** operating machine.

FORCING MACHINERY. Do not force machine. It will do the job safer and better at the rate for which it was designed.

NEVER STAND ON MACHINE. Serious injury may occur if machine is tipped or if the cutting tool is unintentionally contacted.

STABLE MACHINE. Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.

USE RECOMMENDED ACCESSORIES. Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.

UNATTENDED OPERATION. To reduce the risk of accidental injury, turn machine **OFF** and ensure all moving parts completely stop before walking away. Never leave machine running while unattended.

MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

DAMAGED PARTS. Regularly inspect machine for damaged, loose, or mis-adjusted parts—or any condition that could affect safe operation. Immediately repair/replace **BEFORE** operating machine. For your own safety, **DO NOT** operate machine with damaged parts!

MAINTAIN POWER CORDS. When disconnecting cord-connected machines from power, grab and pull the plug—**NOT** the cord. Pulling the cord may damage the wires inside. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

EXPERIENCING DIFFICULTIES. If at any time you experience difficulties performing the intended operation, stop using the machine! Contact our Technical Support at (570) 546-9663.



Additional Safety for Drill Presses

WARNING

The primary risks of operating a Drill Press are as follows: You can be killed or seriously injured if clothing, jewelry, or long hair gets entangled with rotating spindle or cutting tool/bit. You can be severely cut or get your fingers amputated from contact with rotating cutting tool/bit. You can be blinded or struck with great force by broken cutting tools, metal chips, unsecured workpieces, chuck keys, or other adjustment tools thrown from rotating spindle. To reduce your risk of serious injury when operating this machine, completely heed and understand the following:

UNDERSTAND ALL CONTROLS. Make sure you understand the function and proper use of all controls before starting. This will help you avoid making mistakes that result in serious injury.

WEAR FACE SHIELD. Always wear a face shield in addition to safety glasses. This provides more complete protection for your face than safety glasses alone.

REMOVE CHUCK KEY OR TOOLS BEFORE STARTUP. Always remove chuck key, drawbar wrench, and other tools used on the spindle immediately after use. This will prevent them from being thrown by the spindle upon startup.

PROPERLY SECURE CUTTING TOOL/BIT. Firmly secure cutting tool or drill bit so it does not fly out of spindle during operation or startup.

USE CORRECT SPINDLE SPEED. Follow recommended speeds and feeds for each size/type of cutting tool/bit and workpiece material. This helps avoid tool breakage during operation and helps ensure best cutting results.

ALLOW SPINDLE TO STOP. To minimize risk of entanglement, always allow spindle to stop on its own. DO NOT stop spindle using your hand or any other object.

SECURE WORKPIECE TO TABLE. An unsecure workpiece may unexpectedly shift, spin out of control, or be thrown if cutting tool/bit "grabs" during operation. NEVER hold workpiece only by hand during operation. Clamp workpiece to table or in a vise mounted to table to properly secure it.

INSPECT CUTTING TOOL/BIT BEFORE USE.

Inspect cutting tools for sharpness, chips, or cracks before each use. Replace dull, chipped, or cracked cutting tools immediately. Damaged bits may break apart during operation. Dull bits increase cutting resistance and are more likely to grab and spin/throw workpiece.

CLEAN MACHINE SAFELY. Never clear chips while spindle is turning. Metal chips or shavings can be razor sharp. DO NOT clear chips by hand or compressed air—use a brush or vacuum instead.

PROPERLY MAINTAIN MACHINE. Keep machine in proper working condition to help ensure that it functions safely and all guards and other components work as intended. Perform routine inspections and all necessary maintenance. Never operate machine with damaged or worn parts that can break or result in unexpected movement during operation.

DISCONNECT POWER FIRST. To reduce risk of electrocution or injury from unexpected startup, make sure drill is turned **OFF**, disconnected from power, and all moving parts have come to a complete stop before changing cutting tools or starting any inspection, adjustment, or maintenance procedure.

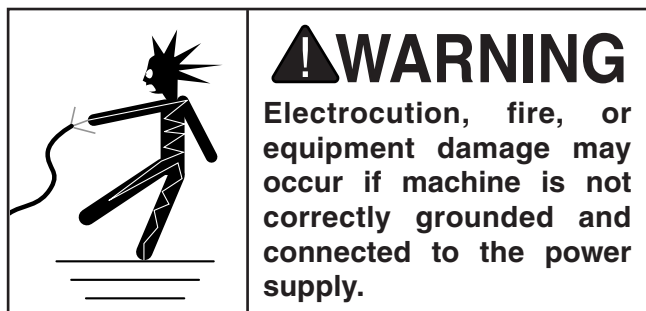
POWER DISRUPTION. In the event of a local power outage during operation, turn spindle switch **OFF** to avoid a possible sudden startup once power is restored.



SECTION 2: POWER SUPPLY

Availability

Before installing the machine, consider the availability and proximity of the required power supply circuit. If an existing circuit does not meet the requirements for this machine, a new circuit must be installed. To minimize the risk of electrocution, fire, or equipment damage, installation work and electrical wiring must be done by an electrician or qualified service personnel in accordance with all applicable codes and standards.



Full-Load Current Rating

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

Full-Load Current Rating at 220V 8.6 Amps

The full-load current is not the maximum amount of amps that the machine will draw. If the machine is overloaded, it will draw additional amps beyond the full-load rating.

If the machine is overloaded for a sufficient length of time, damage, overheating, or fire may result—especially if connected to an undersized circuit. To reduce the risk of these hazards, avoid overloading the machine during operation and make sure it is connected to a power supply circuit that meets the specified circuit requirements.

Circuit Information

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)

! CAUTION
For your own safety and protection of property, consult an electrician if you are unsure about wiring practices or electrical codes in your area.

Note: *Circuit requirements in this manual apply to a dedicated circuit—where only one machine will be running on the circuit at a time. If machine will be connected to a shared circuit where multiple machines may be running at the same time, consult an electrician or qualified service personnel to ensure circuit is properly sized for safe operation.*

Circuit Requirements

This machine is prewired to operate on a power supply circuit that has a verified ground and meets the following requirements:

Nominal Voltage 208V, 220V, 230V, 240V
Cycle 60 Hz
Phase Single-Phase
Power Supply Circuit 15 Amps
Plug/Receptacle NEMA 6-15



Grounding Requirements

This machine **MUST** be grounded. In the event of certain malfunctions or breakdowns, grounding reduces the risk of electric shock by providing a path of least resistance for electric current.

This machine is equipped with a power cord that has an equipment-grounding wire and a grounding plug. Only insert plug into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances. **DO NOT** modify the provided plug!

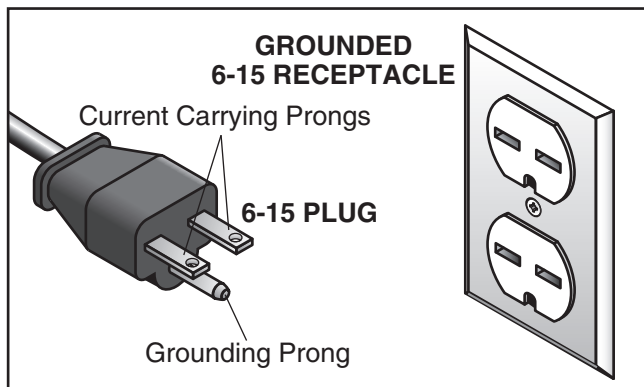
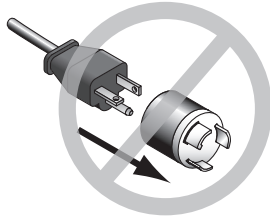


Figure 4. Typical 6-15 plug and receptacle.

! CAUTION



No adapter should be used with plug. If plug does not fit available receptacle, or if machine must be reconnected for use on a different type of circuit, reconnection must be performed by an electrician or qualified service personnel, and it must comply with all local codes and ordinances.

! WARNING

Serious injury could occur if you connect machine to power before completing setup process. DO NOT connect to power until instructed later in this manual.

Improper connection of the equipment-grounding wire can result in a risk of electric shock. The wire with green insulation (with or without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

Extension Cords

We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

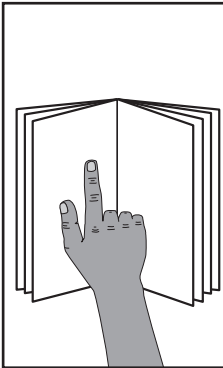
Extension cords cause voltage drop, which can damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must be in good condition and contain a ground wire and matching plug/receptacle. Additionally, it must meet the following size requirements:

Minimum Gauge Size 14 AWG
Maximum Length (Shorter is Better).....50 ft.

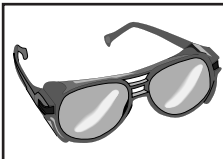


SECTION 3: SETUP



!WARNING

This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!



!WARNING

Wear safety glasses during the entire setup process!



!WARNING

HEAVY LIFT!

Straining or crushing injury may occur from improperly lifting machine or some of its parts. To reduce this risk, get help from other people and use a forklift (or other lifting equipment) rated for weight of this machine.

Needed for Setup

The following items are needed, but not included, for the setup/assembly of this machine.

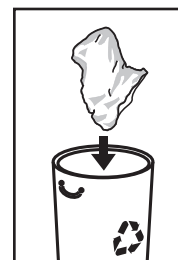
Description	Qty
• Safety Glasses (for each person).....	1
• Cleaner/Degreaser (Page 14)	1
• Disposable Shop Rags.....	1
• Brass Hammer	1
• Lifting Slings (Rated for at least 800 lbs.) ..	2
• Lifting Equipment (Rated for at least 800 lbs.)	1
• Additional People	1

Unpacking

Your machine was carefully packaged for safe transportation. Remove the packaging materials from around your machine and inspect it. If you discover any damage, *please call us immediately at (570) 546-9663 for advice.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of your shipment, inventory the contents.



!WARNING

SUFFOCATION HAZARD!

Keep children and pets away from plastic bags or packing materials shipped with this machine. Discard immediately.



Inventory

The following is a list of items shipped with your machine. Before beginning setup, lay these items out and inventory them.

If any non-proprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.

NOTICE

If you cannot find an item on this list, carefully check around/inside the machine and packaging materials. Often, these items get lost in packaging materials while unpacking or they are pre-installed at the factory.

Small Item Inventory (Figure 5)	Qty
A. Hex Wrench (3, 4, 5mm)	1 Ea.
B. Drift Key.....	1
C. Bottle for Oil	1
D. Open-End Wrench 22–24mm.....	1
E. Open-End Wrench 17–19mm	1
F. Drill Chuck Key.....	1
G. Drill Chuck B16, 1–13mm	1
H. Drill Chuck Arbor R-8–MT#3.....	1
I. Spindle Sleeve R-8–MT#3	1
J. Spindle Sleeve MT#3–MT#2	1
K. Hardware Bag (Not Shown).....	1
—Hex Nuts M12-1.75.....	2
—T-Bolts M12-1.75 x 55.....	2
—Flat Washers 12mm.....	2
L. Toolbox (Not Shown)	1

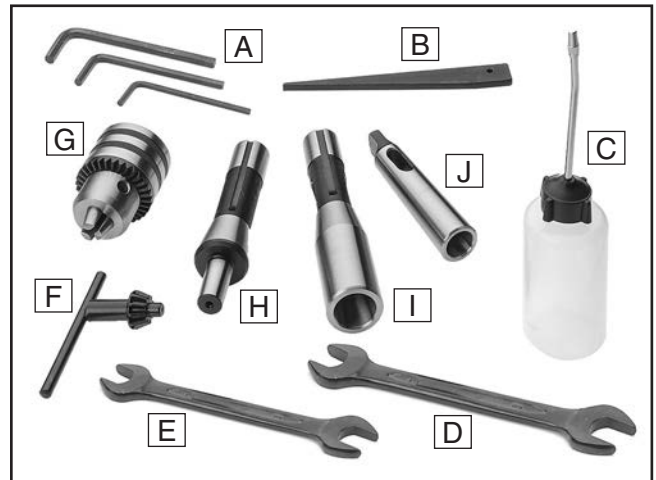


Figure 5. Model G0779 toolbox contents.



Cleanup

The unpainted surfaces of your machine are coated with a heavy-duty rust preventative that prevents corrosion during shipment and storage. This rust preventative works extremely well, but it will take a little time to clean.

Be patient and do a thorough job cleaning your machine. The time you spend doing this now will give you a better appreciation for the proper care of your machine's unpainted surfaces.


There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

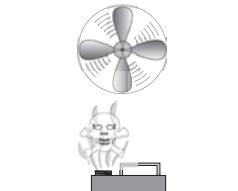
Before cleaning, gather the following:

- Disposable rags
- Cleaner/degreaser (WD-40 works well)
- Safety glasses & disposable gloves
- Plastic paint scraper (optional)

Basic steps for removing rust preventative:

1. Put on safety glasses.
2. Coat the rust preventative with a liberal amount of cleaner/degreaser, then let it soak for 5–10 minutes.
3. Wipe off the surfaces. If your cleaner/degreaser is effective, the rust preventative will wipe off easily. If you have a plastic paint scraper, scrape off as much as you can first, then wipe off the rest with the rag.
4. Repeat **Steps 2–3** as necessary until clean, then coat all unpainted surfaces with a quality metal protectant to prevent rust.

	WARNING Gasoline and petroleum products have low flash points and can explode or cause fire if used to clean machinery. Avoid using these products to clean machinery.
--	--

	CAUTION Many cleaning solvents are toxic if inhaled. Only work in a well-ventilated area.
--	---

NOTICE Avoid chlorine-based solvents, such as acetone or brake parts cleaner, that may damage painted surfaces.

T23692—Orange Power Degreaser

A great product for removing the waxy shipping grease from your machine during clean up.

<p>Call 1-800-523-4777 To Order</p>	
--	---

Figure 6. T23692 Orange Power Degreaser.



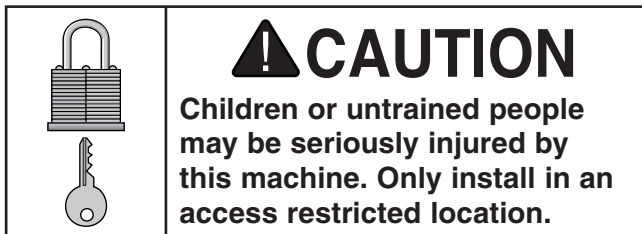
Site Considerations

Weight Load

Refer to the **Machine Data Sheet** for the weight of your machine. Make sure that the surface upon which the machine is placed will bear the weight of the machine, additional equipment that may be installed on the machine, and the heaviest workpiece that will be used. Additionally, consider the weight of the operator and any dynamic loading that may occur when operating the machine.

Space Allocation

Consider the largest size of workpiece that will be processed through this machine and provide enough space around the machine for adequate operator material handling or the installation of auxiliary equipment. With permanent installations, leave enough space around the machine to open or remove doors/covers as required by the maintenance and service described in this manual. **See below for required space allocation.**



Physical Environment

The physical environment where the machine is operated is important for safe operation and longevity of machine components. For best results, operate this machine in a dry environment that is free from excessive moisture, hazardous chemicals, airborne abrasives, or extreme conditions. Extreme conditions for this type of machinery are generally those where the ambient temperature range exceeds 41°–104°F; the relative humidity range exceeds 20%–95% (non-condensing); or the environment is subject to vibration, shocks, or bumps.

Electrical Installation

Place this machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure to leave enough space around machine to disconnect power supply or apply a lockout/tagout device, if required.

Lighting

Lighting around the machine must be adequate enough that operations can be performed safely. Shadows, glare, or strobe effects that may distract or impede the operator must be eliminated.

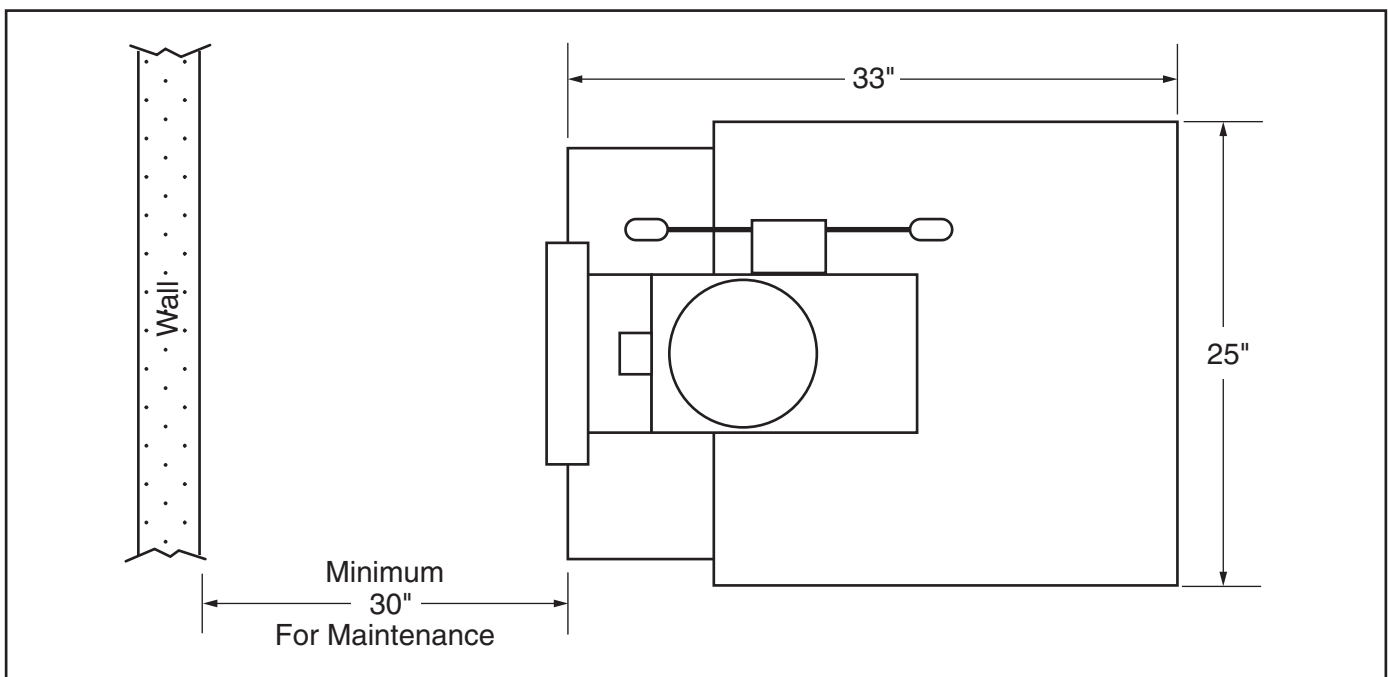



Figure 7. Minimum working clearances.



Lifting & Placing

	<p>! WARNING HEAVY LIFT! Straining or crushing injury may occur from improperly lifting machine or some of its parts. To reduce this risk, get help from other people and use a forklift (or other lifting equipment) rated for weight of this machine.</p>
---	---

To lift and place the machine:

1. Move shipping crate next to intended location of drill press, then remove top portion of crate from shipping pallet.
2. To help balance machine when moving, move table as close to base as possible, and raise headstock to its highest position.
3. Place lifting sling around headstock (see **Figure 8**), and attach it securely to forklift (or other power lifting equipment).

Note: Make sure you tighten all locks that restrict moving parts to avoid sudden shifts which could unbalance machine.

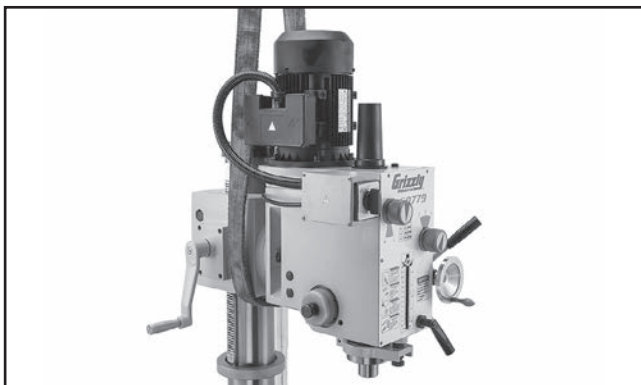


Figure 8. Typical lifting sling position.

4. Unbolt machine from pallet.
5. With another person to help to steady machine, lift it just enough to clear pallet and any floor obstacles, then place it in its final position on shop floor.

Anchoring to Floor

Number of Mounting Holes 4
Diameter of Mounting Hardware..... 1/2"

Anchoring machinery to the floor prevents tipping or shifting and reduces vibration that may occur during operation, resulting in a machine that runs slightly quieter and feels more solid.

If the machine will be installed in a commercial or workplace setting, or if it is permanently connected (hardwired) to the power supply, local codes may require that it be anchored to the floor.

If not required by any local codes, fastening the machine to the floor is an optional step. If you choose not to do this with your machine, we recommend placing it on machine mounts, as these provide an easy method for leveling and they have vibration-absorbing pads.

Anchoring to Concrete Floors

Lag shield anchors with lag screws (see below) are a popular way to anchor machinery to a concrete floor, because the anchors sit flush with the floor surface, making it easy to unbolt and move the machine later, if needed. However, anytime local codes apply, you **MUST** follow the anchoring methodology specified by the code.

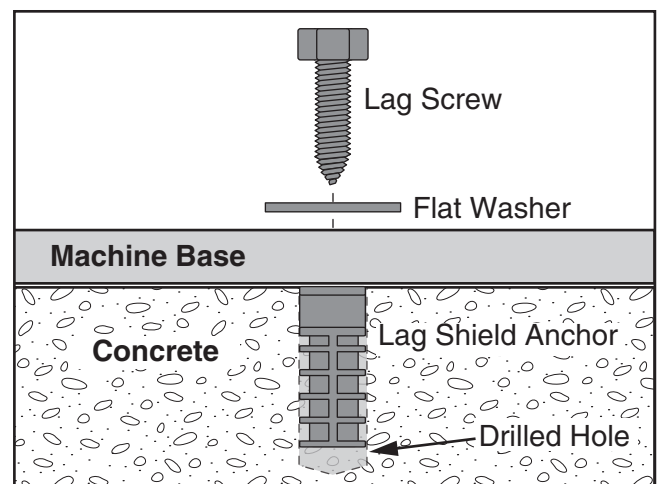


Figure 9. Popular method for anchoring machinery to a concrete floor.



Arbor/Chuck Assembly

An arbor is included for the drill chuck that comes with this machine. The following procedure describes how to install the arbor in the chuck.

After the arbor is installed in the drill chuck, it is very difficult to separate the assembly. If you would like to use a different chuck in the future, we recommend obtaining a new arbor.

Important: *DO NOT install the drill chuck and arbor assembly into the spindle until AFTER the test run.*

To join drill chuck and arbor:

1. Use acetone or lacquer thinner to clean drill chuck and arbor mating surfaces, especially the bore.
2. Retract chuck jaws completely into chuck.
3. Insert small end of arbor into chuck.
4. Hold assembly by the arbor and tap chuck onto a block of wood with medium force, as illustrated below.

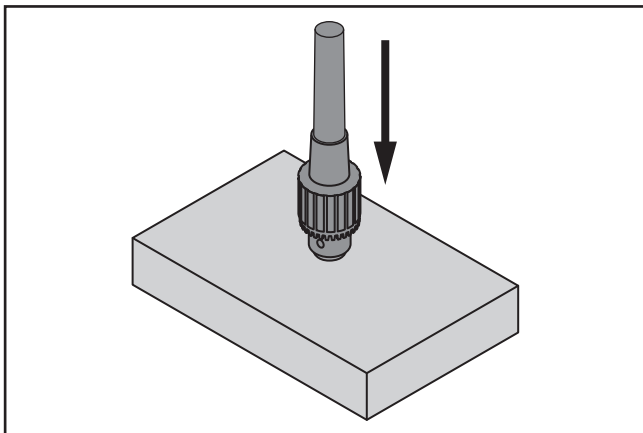


Figure 10. Arbor/chuck assembly.

5. Attempt to separate drill chuck and arbor by hand—if they separate, repeat **Steps 3–4**.

Initial Lubrication



To prevent spillage, this machine was shipped from the factory without any oil in it. The head-stock oil reservoir must be properly filled with oil before the drill press can be operated for the first time. Refer to the **Lubrication** section, beginning on **Page 31**, for details on how to check and add oil.

NOTICE

Damage caused by running the drill press without oil in the reservoir will not be covered under warranty.



Test Run

Once assembly is complete, test run the machine to ensure it is properly connected to power and safety components are functioning properly.

If you find an unusual problem during the test run, immediately stop the machine, disconnect it from power, and fix the problem BEFORE operating the machine again. The **Troubleshooting** table in the **SERVICE** section of this manual can help.

WARNING

Serious injury or death can result from using this machine BEFORE understanding its controls and related safety information. DO NOT operate, or allow others to operate, machine until the information is understood.

WARNING

DO NOT start machine until all preceding setup instructions have been performed. Operating an improperly set up machine may result in malfunction or unexpected results that can lead to serious injury, death, or machine/property damage.

NOTICE

Make sure headstock has proper amount of oil before performing *Test Run* and *Spindle Break-In*. Otherwise, headstock components may be damaged and void warranty. Refer to *Page 32* for detailed instructions.

To test run machine:

1. Clear all setup tools away from machine.
2. Connect machine to power supply.
3. Set spindle speed to 90 RPM (see **Page 25**).
4. Rotate spindle switch to RIGHT to turn machine **ON**. Verify motor operation, then turn machine **OFF**. The motor should run smoothly and without unusual problems or noises. Repeat with switch set to LEFT.

Spindle Break-In

The spindle break-in procedure distributes lubrication throughout the bearings to reduce the risk of early bearing failure if there are any "dry" spots or areas where lubrication has settled in the bearings. You **must** complete this procedure **before** placing operational loads on the spindle for the first time when the machine is new or if it has been sitting idle for longer than 6 months.

Always start the spindle break-in at the lowest speed to minimize wear if there *are* dry spots. Allow the spindle to run long enough to warm up and distribute the bearing grease, then incrementally increase spindle speeds, allowing the spindle to run the same amount of time at each speed, until reaching the maximum spindle speed. Following the break-in procedure in this progressive manner helps minimize any potential wear that could occur until lubrication is fully distributed.

NOTICE

Do not leave drill press unattended during Spindle Break-In procedure. If your attention is needed elsewhere during this procedure, turn machine **OFF** and restart procedure later from the beginning.

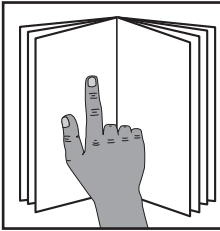
To perform spindle break-in procedure:

1. Make sure spindle is completely stopped, then set spindle speed to 90 RPM (refer to **Page 25** for detailed instructions).
2. Run machine for a minimum of 5 minutes in each spindle direction.
3. Repeat **Step 2** for each of the spindle speeds.
4. Change headstock oil (refer to **Page 31** for detailed instructions).

Congratulations! The test run and spindle break-in are now complete!



SECTION 4: OPERATIONS

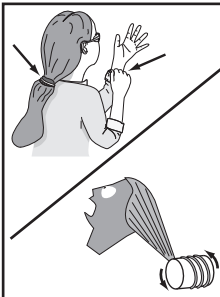
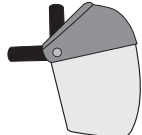


!WARNING

To reduce your risk of serious injury, read this entire manual **BEFORE** using machine.

!WARNING

To reduce risk of eye or face injury from flying chips, always wear approved safety glasses and a face shield when operating this machine.



!WARNING

Keep hair, clothing, and jewelry away from moving parts at all times. Entanglement can result in death, amputation, or severe crushing injuries!

NOTICE

If you are not experienced with this type of machine, **WE STRONGLY RECOMMEND** that you seek additional training outside of this manual. Read books/magazines or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

Operation Overview

The purpose of this overview is to provide the novice machine operator with a basic understanding of how the machine is used during operation, so the machine controls/components discussed later in this manual are easier to understand.

Due to the generic nature of this overview, it is **not** intended to be an instructional guide. To learn more about specific operations, read this entire manual and seek additional training from experienced machine operators, and do additional research outside of this manual by reading "how-to" books, trade magazines, or websites.

To complete a typical operation, the operator does the following:

1. Examines workpiece to make sure it is suitable for drilling.
2. Installs correct tooling for the operation.
3. Firmly secures workpiece to table using a vise or T-slot clamps.
4. Adjusts table to correct height, then locks it in place.
5. Adjusts headstock elevation to correct height, then locks it in place.
6. Puts on required safety glasses and face shield.
7. Connects machine to power.
8. Selects spindle RPM with speed control levers and rotates spindle direction switch to turn machine **ON**.
9. Begins drilling.
10. When finished, rotates spindle direction switch to STOP and disconnects machine from power.



Positioning Table

The table moves vertically, rotates 360°, pivots around the column, and tilts 60° left or right.

Tool Needed	Qty
Open-End Wrench 19mm.....	1

Raising/Lowering Table

1. Remove any loose objects from table surface.
2. Loosen table lock handles shown in **Figure 11**.
3. Adjust table height by rotating table elevation crank (see **Figure 11**), then retighten table lock handles.

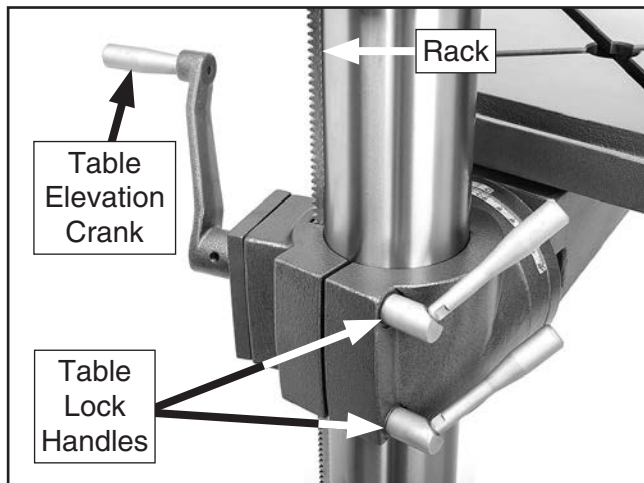


Figure 11. Table elevation and rotation controls.

Pivoting Table Around Column

1. Remove any loose objects from table surface.
2. Loosen table lock handles (see **Figure 11**).
3. Pivot table to desired location.

Note: Ensure rack (see **Figure 11**) moves smoothly around column without binding in upper/lower guide rings.

4. Retighten lock handles.

Rotating Table

1. Remove any loose objects from table surface.
2. Loosen lock handle shown in **Figure 12**.

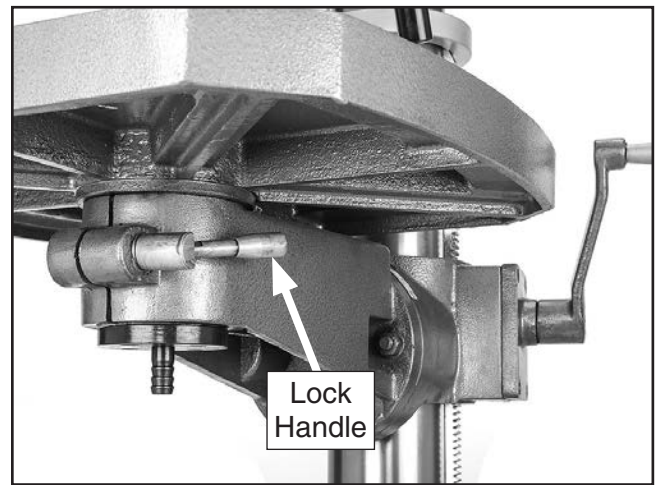


Figure 12. Lock handle for controlling table rotation.

3. Rotate table to desired position, then retighten lock handle.

Tilting Table

1. Remove all objects from table surface.
2. Loosen three hex nuts shown in **Figure 13**.
3. Tilt table until pointer aligns with desired angle on scale (see **Figure 13**).

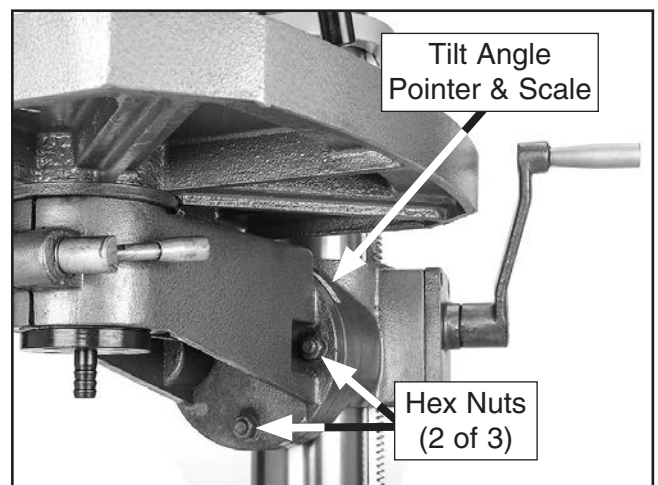


Figure 13. Table tilt controls.

4. Retighten hex nuts.



Positioning Headstock

The Model G0779 headstock moves vertically, pivots 360° around the column, and tilts 90° left or right.

Tools Needed	Qty
Wrench 24mm	1
Wrench 22mm	1

Raising/Lowering Headstock

1. DISCONNECT MACHINE FROM POWER!
2. Loosen two hex nuts shown in **Figure 14**.

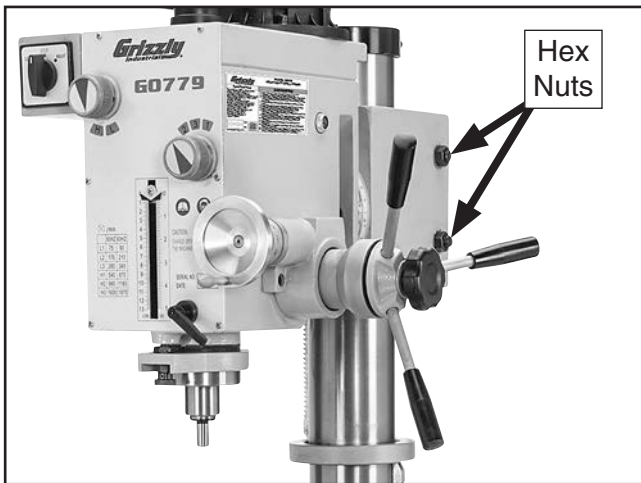


Figure 14. Location of hex nuts that lock headstock to column.

3. Use head elevation crank shown in **Figure 15** to adjust headstock height.

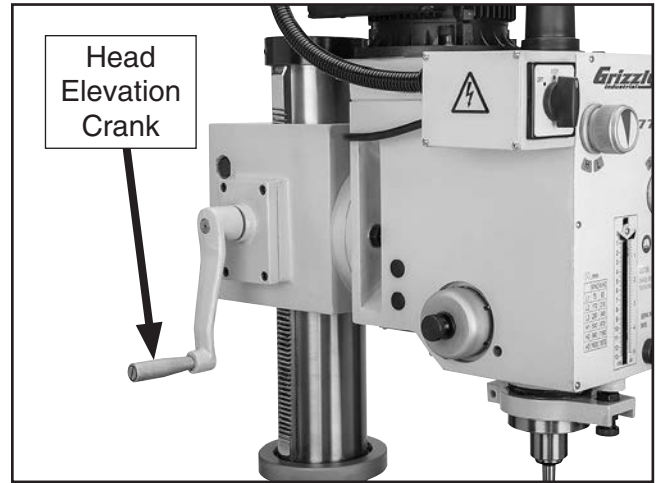


Figure 15. Location of head elevation crank.

4. Retighten hex nuts before connecting to power.

Pivoting Headstock Around Column

1. DISCONNECT MACHINE FROM POWER!
2. Loosen hex nuts shown in **Figure 14**.
3. Make sure headstock and cords can move unobstructed, then manually rotate headstock around column **Figure 15**.
4. Retighten hex nuts before connecting to power.



Tilting Headstock

1. DISCONNECT MACHINE FROM POWER!
2. Remove cover plate from bottom of headstock (see **Figure 16**). The plate is secured with (4) M4-.7 x 6 button head cap screws.
3. Loosen three tilt-lock hex nuts (see **Figures 17–16**).

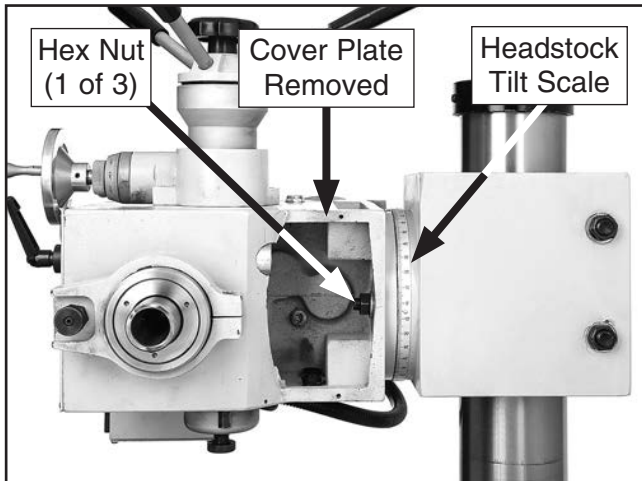


Figure 16. Location of tilt-lock hex nut underneath headstock, and tilt scale.

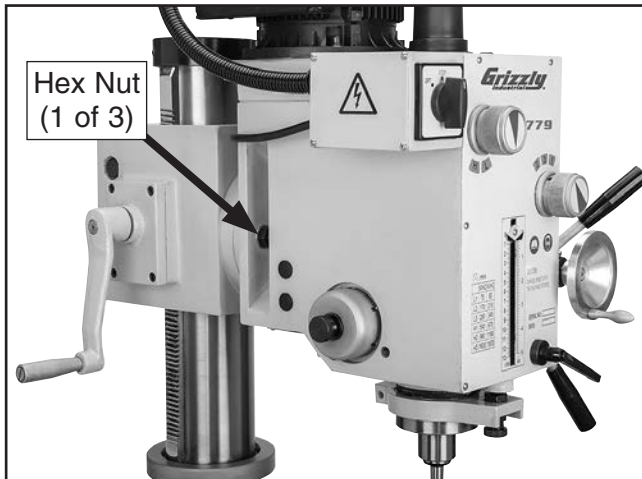


Figure 17. Location of tilt-lock hex nuts (one on each side of head).

4. Using headstock tilt scale shown in **Figure 16** as a guide, swivel headstock to desired position, then retighten tilt-lock hex nuts and replace cover plate.

Installing/Removing Tooling

This machine features a spindle that accepts R-8 collets and arbors. It can also use MT#3 or MT#2 tooling with the included adapter sleeves.

The Model G0779 includes the following spindle tools (see **Figure 18**):

- A. B16 Drill Chuck w/R-8 Arbor.** Refer to **Arbor/Chuck Assembly** on **Page 17**.
- B. R-8–MT#3 Spindle Sleeve.** Used for MT#3 tools and will accommodate tools with a tang. It also has a drift key slot for tool removal.
- C. MT#3–MT#2 Spindle Sleeve.** Used with the R-8–MT#3 spindle sleeve for MT#2 tools and has a drift key slot for tool removal.
- D. Drift Key:** Use for tool removal.

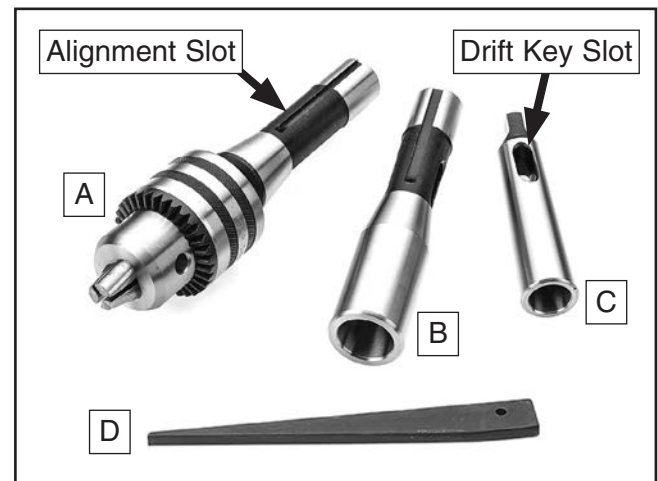



Figure 18. Drill chuck, arbors, and drift key included with Model G0779.

	<p>CAUTION Cutting tools are sharp and can easily cause laceration injuries. Always protect your hands with leather gloves or shop rags when handling cutting tools.</p>
--	---



Installing Tooling

Tool Needed	Qty
Open-End Wrench 19mm.....	1

To install tooling:

1. DISCONNECT MACHINE FROM POWER!
2. Remove drawbar cap, as shown in **Figure 19**.
3. Align tool alignment slot (see **Figure 18** on **Page 22**) with pin inside spindle, then insert tooling into spindle until it contacts drawbar.

Note: Height of drawbar inside spindle can be changed by rotating adjustment nut (see **Figure 19**).

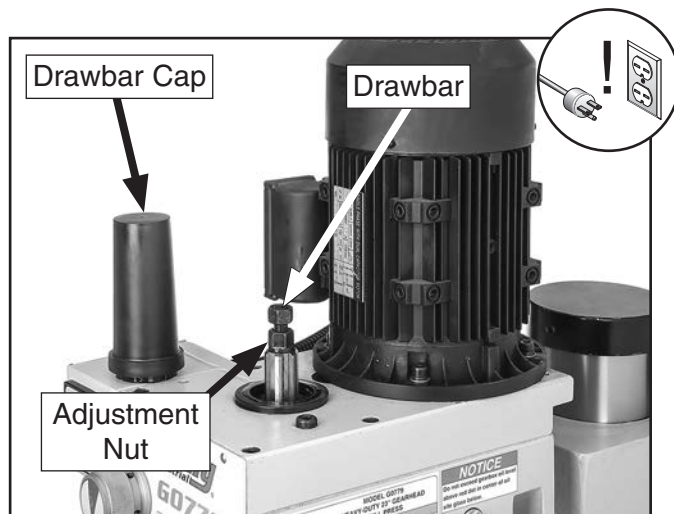


Figure 19. Drawbar components used when installing/removing tooling.

4. Working from the top, thread drawbar into tool by hand until it is snug, then use a 19mm wrench to tighten it.

Note: Do not overtighten drawbar. Overtightening makes tool removal difficult and will damage arbor and threads.

5. Re-install drawbar cap.

Removing Tooling

Tools Needed	Qty
Wrench 19mm	1
Brass Head or Dead Blow Hammer.....	1

To remove tooling:

1. DISCONNECT MACHINE FROM POWER!
2. Remove drawbar cap and unthread drawbar from tool one full rotation.

Note: Do not fully unthread tool from drawbar, or drawbar and tool threads could be damaged in next step.

3. Tap top of drawbar with hammer to unseat taper.
4. Hold onto tool with one hand and fully unthread drawbar.



Using Spindle Downfeed Controls

This machine has coarse downfeed levers and a fine downfeed handwheel.

To operate the downfeed levers, simply pull forward and down on the lever nearest you. The spindle will go down as far as it can until you stop pulling or until it hits the depth stop, then it will automatically return to the top when you release pressure on the handle.

Note: Do not let go of the handle until the spindle returns to the top position or the spindle will slam upward into the quill.

Use the fine downfeed handwheel to control the spindle travel up or down in slow, small amounts. If necessary, you can lock the quill/spindle in a lower position with the quill lock lever (see **Figure 20**).

To operate fine downfeed handwheel:

1. Tighten downfeed selector knob, shown in **Figure 20**. This transfers control from downfeed levers to fine downfeed handwheel.

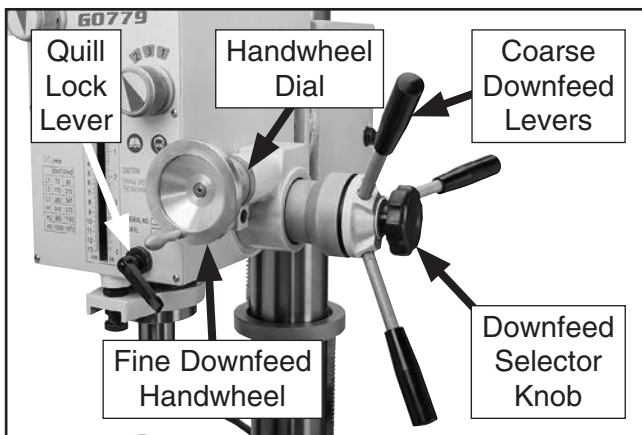


Figure 20. Downfeed controls.

2. Loosen thumb screw on rim surface of handwheel dial, turn dial until "0" lines up with index line, then retighten thumb screw.
3. Rotate handwheel to move quill/spindle up or down. Each complete revolution equals 0.1".

Setting Depth Stop

The depth stop limits the drilling depth or downward movement of the cutting tool. Maximum depth is 5". This is useful when performing the same operation multiple times.

To set depth stop:

1. DISCONNECT MACHINE FROM POWER!
2. Install tooling (refer to **Page 23**), then make sure spindle is drawn all the way up into headstock.
3. Loosen hex nuts that lock headstock, and lower headstock (see **Raising/Lowering Headstock** on **Page 21**) until tooling is approximately $\frac{1}{8}$ " above workpiece, then retighten hex nuts.
4. Rotate depth stop adjustment knob until top of depth stop pointer is level with desired depth as listed on scale (see **Figure 21**).

Note: The depth stop scale functions as a general guide only. It is not intended for low-tolerance, precision results. To calibrate the depth stop see **Calibrating Depth Stop** on **Page 36**.

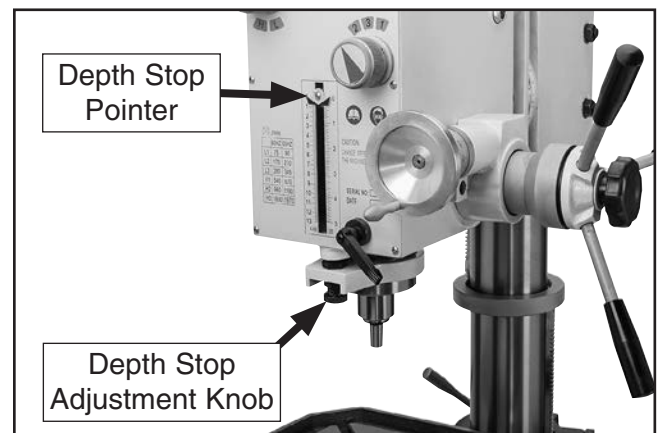


Figure 21. Location of depth stop controls.



Spindle Speed

Using the correct spindle speed is important for safe and satisfactory results, as well as maximizing tool life.

To set the spindle speed for your operation, you will need to: 1) Determine the best spindle speed for the cutting task, and 2) configure the spindle speed levers to produce the required spindle speed.

Determining Spindle Speed

Many variables affect the optimum spindle speed to use for any given operation, but the two most important are the recommended cutting speed for the workpiece material and the diameter of the cutting tool, as noted in the formula shown in **Figure 22**.

$\frac{\text{*Recommended Cutting Speed (FPM)} \times 12}{\text{Tool Dia. (in inches)} \times 3.14} = \text{Spindle Speed (RPM)}$ <p>*Double if using carbide cutting tool</p>
--

Figure 22. Spindle speed formula for drills.

Cutting speed, typically defined in feet per minute (FPM), is the speed at which the edge of a tool moves across the material surface.

A recommended cutting speed is an ideal speed for cutting a type of material in order to produce the desired finish and optimize tool life.

The books **Machinery's Handbook** or **Machine Shop Practice**, and some internet sites, provide excellent recommendations for which cutting speeds to use when calculating the spindle speed. These sources also provide a wealth of additional information about the variables that affect cutting speed and they are a good educational resource.

Also, there are a large number of easy-to-use spindle speed calculators that can be found on the internet. These sources will help you take into account the applicable variables in order to determine the best spindle speed for the operation.

Setting Spindle Speed

Use the chart below or the one on the headstock when setting the spindle speed.

Spindle Speed	Range Lever	Speed Lever
90 RPM	L	1
210 RPM	L	2
345 RPM	L	3
670 RPM	H	1
1180 RPM	H	2
1970 RPM	H	3

NOTICE

Change spindle speed ONLY when the spindle is completely stopped. Otherwise, machine damage could occur.

With the spindle completely stopped, position the spindle speed selectors (see **Figure 23**) to set the spindle speed.

Note: *If necessary, rotate the spindle by hand to mesh the gears when changing speeds.*

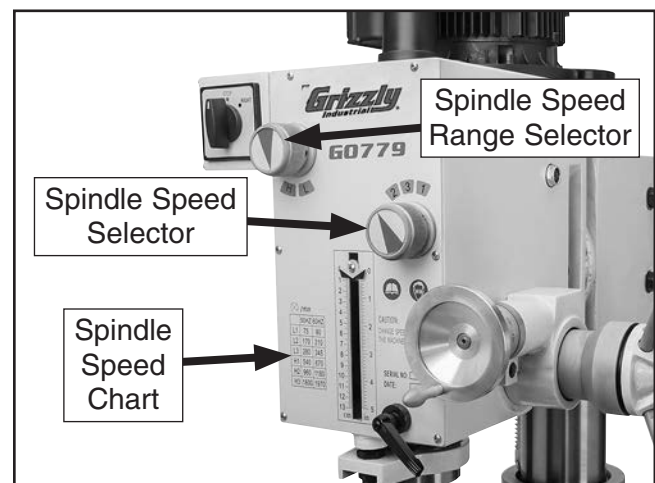


Figure 23. Spindle speed controls.



Calculating Spindle Speed for Drilling

Using the Drilling Speed Chart

The chart shown in **Figure 24** is intended as a guide only. Always follow the manufacturer's speed recommendations if provided with your drill bits, cutters, or hole saws. Exceeding the recommended speeds may be dangerous to the operator.

The speeds shown here are intended to get you started. The optimum speed will always depend on various factors, including tool diameter, drilling pressure, material hardness, material quality, and desired finish.

Often, when drilling materials other than wood, some type of lubrication is necessary.

Lubrication Suggestions

WoodNone
 PlasticsSoapy Water
 BrassWater-Based Lubricant
 Aluminum..... Paraffin-Based Lubricant
 Mild Steel..... Oil-Based Lubricant

⚠ CAUTION

Larger bits turning at slower speeds tend to grab the workpiece aggressively. This can result in the operator's hand being pulled into the bit or the workpiece being thrown with great force. Always clamp the workpiece to the table to prevent injuries.

Twist/Brad Point Drill Bits	Soft Wood	Hard Wood	Plastic	Brass	Aluminum	Mild Steel
1/16" – 3/16"	3000	2500	2500	2500	3000	2500
13/64" – 3/8"	2000	1500	2000	1250	2500	1250
25/64" – 5/8"	1500	750	1500	750	1500	600
11/16" – 1"	750	500	1000	400	1000	350

Spade/Forstner Bits	Soft Wood	Hard Wood	Plastic	Brass	Aluminum	Mild Steel
1/4" – 1/2"	2000	1500	/	/	/	/
9/16" – 1"	1500	1250	/	/	/	/
1-1/8" – 1-7/8"	1000	750	/	/	/	/
2-3"	500	350	/	/	/	/

Hole Saws	Soft Wood	Hard Wood	Plastic	Brass	Aluminum	Mild Steel
1/2" – 7/8"	500	500	600	600	600	500
1" – 1-7/8"	400	400	500	500	500	400
2" – 2-7/8"	300	300	400	400	400	300
3" – 3-7/8"	200	200	300	300	300	200
4" – 5"	100	100	200	200	200	100

Rosette Cutters	Soft Wood	Hard Wood	Plastic	Brass	Aluminum	Mild Steel
Carbide Insert Type	350	250	/	/	/	/
One-Piece Type	1800	500	/	/	/	/

Tenon/Plug Cutters	Soft Wood	Hard Wood	Plastic	Brass	Aluminum	Mild Steel
3/8" – 1/2"	1200	1000	/	/	/	/
5/8" – 1"	800	600	/	/	/	/

Figure 24. Drilling speed chart.



SECTION 5: ACCESSORIES

! WARNING

Installing unapproved accessories may cause machine to malfunction, resulting in serious personal injury or machine damage. To reduce this risk, only install accessories recommended for this machine by Grizzly.

NOTICE

Refer to our website or latest catalog for additional recommended accessories.

G5753—Drill Press Vise - 6"

If you use a drill press and value your fingers, you need one of these. Made from high-grade cast iron, these hefty horizontal vises offer support and stability, allowing you to keep your hands well away from fast moving bits and cutters. Includes a sturdy lip along both sides of the base, allowing vise to be mounted to nearly any machine table, using common T-slot clamps.



Figure 25. Model G5753 cast-iron drill press vice.

G1075—52-PC. Clamping Kit

All the blocks, bolts, nuts, and hold-downs are case hardened. This clamping kit includes: 24 studs, 6 step block pairs, 6 T-nuts, 5 flange nuts, 4 coupling nuts, and 6 end hold-downs. The rack can be bolted to the wall or side of the machine for easy access. Features 1/2" T-Nuts & 3/8" bolts.

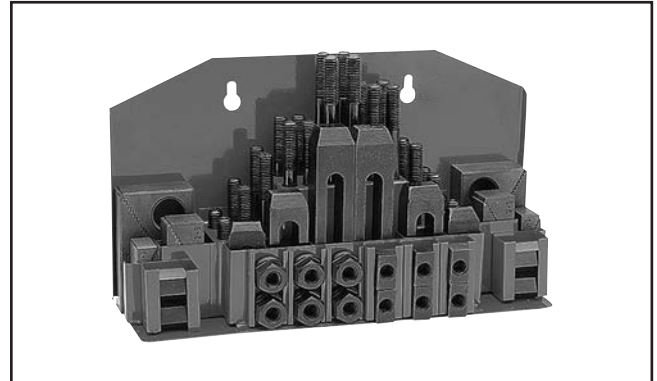


Figure 26. Model G1075 52-Pc. Clamping Kit.

T20501—Face Shield Crown Protector 4"

T20502—Face Shield Crown Protector 7"

T20503—Face Shield Window

T20452—"Kirova" Anti-Reflective S. Glasses

T20451—"Kirova" Clear Safety Glasses

H0736—Shop Fox® Safety Glasses

H7194—Bifocal Safety Glasses 1.5

H7195—Bifocal Safety Glasses 2.0

H7196—Bifocal Safety Glasses 2.5



Figure 27. Assorted safety glasses.

order online at www.grizzly.com or call 1-800-523-4777



H8140—7 Gal. Coolant Tank System

Add this complete 7 Gallon Coolant Tank System to any metal cutting machine for efficient cutting, reduced tool wear and better finishes. Includes pump, switch, enclosed tank, coolant return hose and flexible nozzle with magnetic base. Made in an ISO 9001 factory. Pump motor 1/16 HP, 110V; maximum flow 3.17 gallons per minute; maximum capacity 7 gallons.

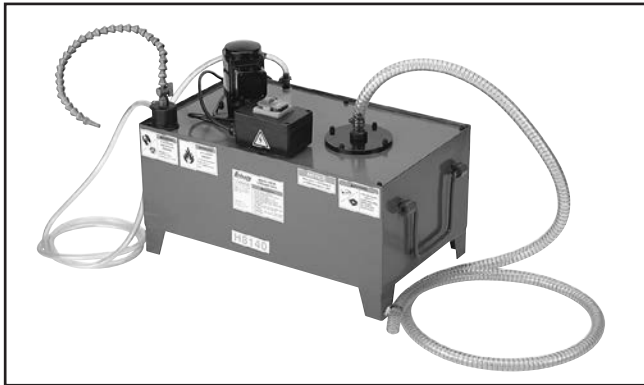


Figure 28. Model H8140 7-Gallon Coolant Tank System.

G1064—Cross-Sliding Vise

This vise features an exclusive slide bar to prevent the jaws from tilting up or sideways when tightening. Adjustable gibs take up any slack on both top and bottom slides. Use this vise on your drill press for cutting keyways and doing light milling jobs.

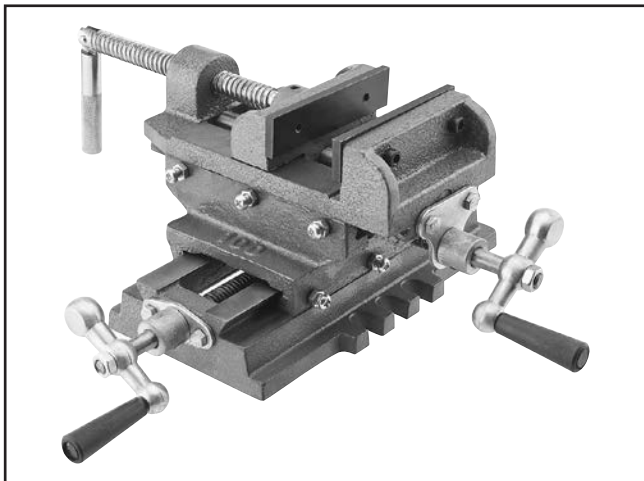


Figure 29. Model G1064 Cross-Sliding Vise.

G3658—Tin-Coated 115-Pc. Drill Bit Set

Titanium nitride-coated bits last up to six times as long as uncoated bits. This 115-piece set features 29 fractional bits, from 1/6" to 1/2" in increments of 1/64", letter bits from A–Z, and 60 number bits. Housed in a rugged steel case.

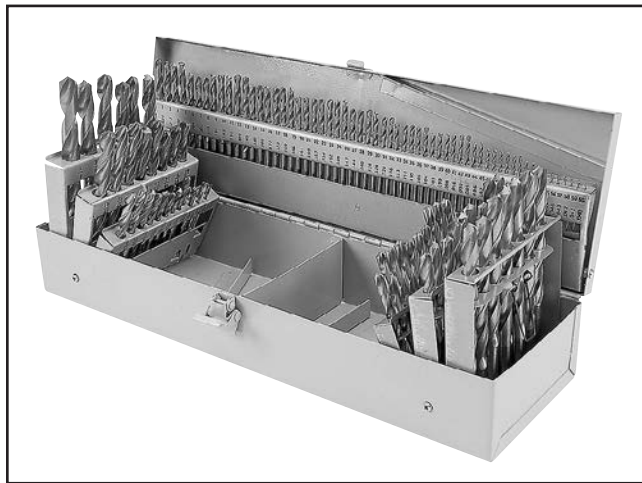


Figure 30. Model G3658 115-Pc. Drill Bit Set.

T23962—ISO 68 Moly-D Way Oil, 5 gal.

T23963—ISO 32 Moly-D Machine Oil, 5 gal.

T26685—ISO 32 Moly-D Machine Oil, 1 gal.

Moly-D oils are some of the best we've found for maintaining the critical components of machinery because they tend to resist run-off and maintain their lubricity under a variety of conditions—as well as reduce chatter or slip. Buy in bulk and save with 5-gallon quantities.



Figure 31. ISO 68 and ISO 32 machine oil.



H7819—Drill & Tap HSS 24-Pc. Set

Our new High Speed Steel Tap and Drill Set comes supplied with 6 of the most commonly used coarse thread sizes. What's more, each size has taps with plug, bottoming and taper grinds allowing you to choose the right tap for any job. The set includes the following tap sizes and corresponding drill bits: 8-32 & #29, 10-24 & #25, 1/4"-20 & #7, 5/16"-18 & F, 3/8"-16 & 5/16" and 1/2"-13 & 27/64".



Figure 32. H7819 Drill & Tap HSS 24-Pc. Set.

T10169—Adjustable Circle Cutter

Produce precision circles in sheet metal, brass, wood, plastic, aluminum, and soft steel with this adjustable circle cutter. The diameter is adjustable up to 8" and includes HSS center and drill bit and double-ended tool bit.

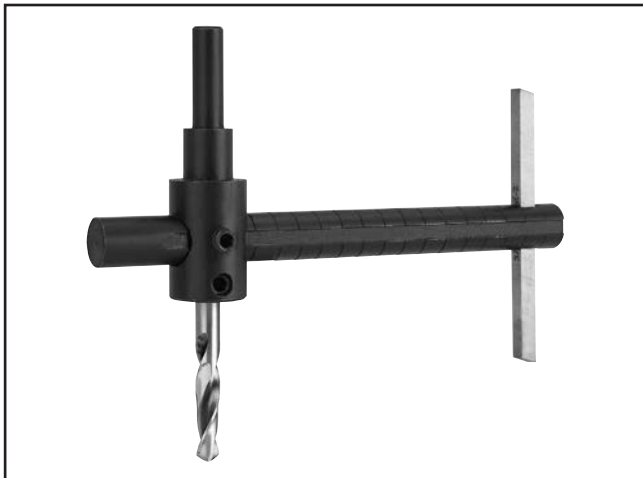


Figure 33. Model T10169 Adjustable Circle Cutter.

H8263—1/2" x R-8 Keyless Chuck with Integral Shank

Precision, Keyless Drill Chucks have integral shanks to fit a variety of spindles including Morse taper, R-8 and Cat 40. Each chuck has a knurled grip for plenty of torque and if that's not enough, they are spanner wrench compatible. (Spanner wrench not included.) Made in an ISO 9001 certified factory.



Figure 34. Model H8263 Precision Keyless Drill Chuck.

H8203—Professional Drill Bit Sharpening Machine (For Bits 1/8"–1/2" in Diameter)

This precision made Drill Bit Sharpening Machine is so simple to use, anyone can sharpen dull, smaller bits in three easy steps. Just set the drill bit in the collet, grind the taper relief angle, then grind the web thinning angle to reduce the center point width. It features a depth adjustment gauge, tapered diamond wheel, 90°–140° angle setting adjustment, and built-in collet tray. Collet sizes include 1/8", 5/32", 3/16", 1/4", 9/32", 5/16", 3/8", 25/64", 7/16", 15/32", and 1/2". Patented in the US!



Figure 35. Model H8203 Professional Drill Bit Sharpening Machine.



G1049—Combination Rotary Table - 6"

Use this 6" Rotary Table for circular cutting, angle setting, boring and spot facing. Table surface and rotating parts are ground for smooth operation. Table is a solid Meehanite casting offering stability and assured accuracy. Ratio on all models is 90-to-1 or 4 degrees per hand-wheel revolution.

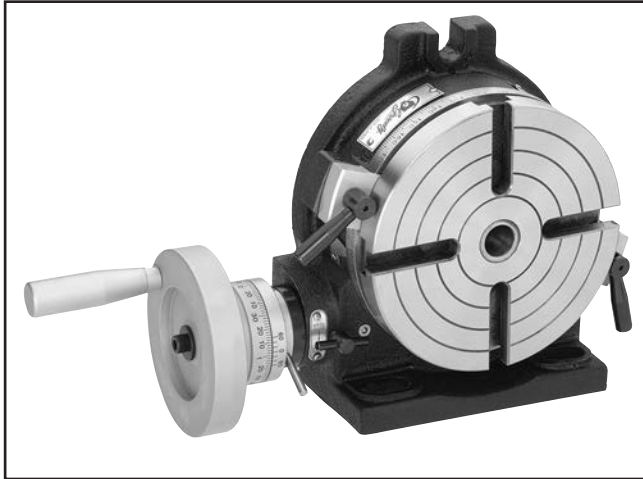


Figure 36. Model G1049 Combination Rotary Table 6".

H2942—Magnetic Base w/Eye Shield 8" x 10"

H2943—Magnetic Base w/Eye Shield 12" x 16"
Need a shield? This is just the thing for setting up extra protection. Powerful magnetic base allows placing the shield just about anywhere and the ball and socket joint allows a large range of positioning choices.



Figure 38. Magnetic base with eye shield.

T26688—R-8 Quick Change Collet 8-Pc. Set

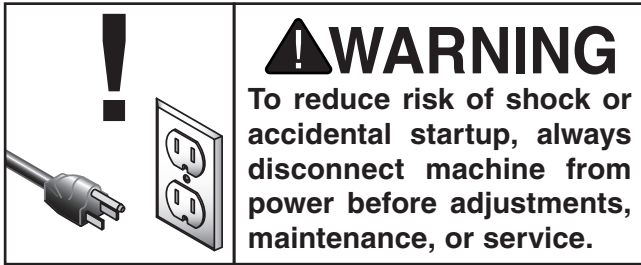
These collets are hardened and ground for maximum holding power and ultra precision. Threaded from $\frac{7}{16}$ "-20 draw bars, this set has a maximum run-out of 0.001". Set includes collect chuck, $\frac{1}{4}$ ", $\frac{5}{16}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ ", $\frac{5}{8}$ ", $\frac{3}{4}$ ", and 1" collets, spanner wrench, and moulded plastic case.



Figure 37. T26688 R-8 Quick Change Collet 8 pc. Set



SECTION 6: MAINTENANCE



Schedule

For optimum performance from your machine, follow this maintenance schedule and refer to any specific instructions given in this section.

Daily Check

- Check/repair loose mounting bolts or fasteners.
- Check/repair worn or damaged wires.
- Check/repair damaged tooling.
- Clean debris and built-up grime off of machine.
- Check/resolve any other unsafe condition.

Every 8 Hours of Operation:

- Check/add headstock oil (**Page 32**).
- Lubricate column, racks, and quill (**Page 33**).

Every 90 Hours of Operation:

- Lubricate quill rack and pinion (**Page 33**).

Every 180 Days of Operation:

- Change headstock oil (**Page 32**).

Cleaning & Protecting

Sawdust, wood chips, and metal chips left on the machine will invite oxidation and a gummy residue buildup around the moving parts. Use a brush and shop vacuum to remove chips and debris from the working surfaces of the mill. Never blow off the mill with compressed air, as this will force metal chips deep into the mechanisms and may cause injury to yourself or bystanders.

Remove any rust build-up from unpainted cast iron surfaces of your drill press and treat with a non-staining lubricant after cleaning.

Keep unpainted cast iron surfaces rust-free with regular applications of ISO 68 way oil (see **Page 28** for offerings from Grizzly).

Lubrication

An essential part of lubrication is cleaning the components before lubricating them.

This step is critical because grime and chips build up on lubricated components, which makes them hard to move. Simply adding more lubricant will not result in smooth moving parts.

Clean all exterior components in this section with mineral spirits, shop rags, and brushes before lubricating.

DISCONNECT MACHINE FROM POWER BEFORE PERFORMING LUBRICATION!

NOTICE

Follow reasonable lubrication practices as outlined in this manual. Failure to do so could lead to premature failure of your machine and will void the warranty.



For the quill, table, and column, an occasional application of light machine oil is all that is necessary. Before applying lubricant, clean off any dust or metal chips.

Your goal is to achieve adequate lubrication. Too much lubrication will attract dirt and dust. Various parts of your machine could lose their freedom of movement as a result.

Headstock Reservoir

Oil TypeModel T23963 or ISO 32 Equivalent
 Oil Amount..... 4³/₄ Qt.
 Check/Add Frequency8 Hours of Operation
 Change Frequency Every 180 Days

The headstock has the proper amount of oil when the sight glass is halfway full (see **Figure 39**).



Figure 39. Location of headstock oil sight glass and fill plug.

Tools Needed	Qty
Hex Wrench 2.5mm.....	1
Hex Wrench 8mm.....	1
Drain Pan (2-Gallon or Larger).....	1

To change headstock oil:

1. Run spindle at 670 RPM for approximately 10 minutes to warm headstock oil.
2. DISCONNECT MACHINE FROM POWER!
3. Remove fill plug (see **Figure 39**).

4. Place drain pan on table under headstock.
5. Remove cover plate from bottom of headstock (see **Figure 40**).
6. Remove drain plug (see **Figure 40**) from underneath headstock and allow oil to drain into pan.

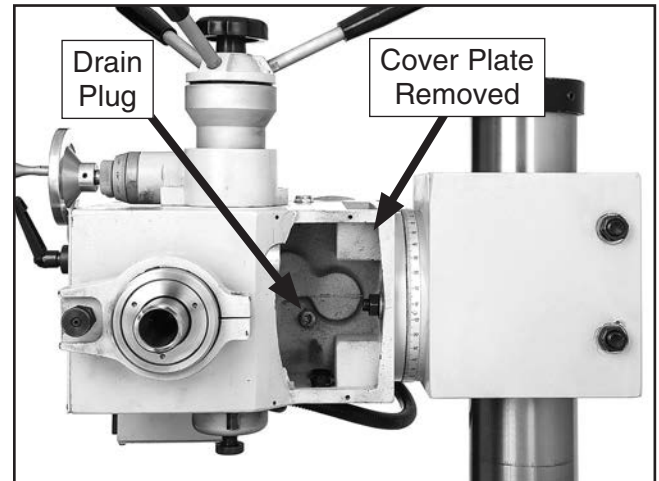


Figure 40. Headstock drain plug (headstock tilted 90° for clarity).

NOTICE

Follow federal, and state, and local requirements for proper disposal of used oil.

7. Replace drain plug.
8. Add oil until sight glass is halfway full, then replace fill plug and cover plate.
9. Clean up any spilled oil to prevent slipping hazards.



Column, Racks, & Quill

Oil TypeModel T23962 or ISO 68 Equivalent
Oil Amount.....Thin Coat
Lubrication Frequency8 Hrs. of Operation

Refer to **Figures 41–42** to identify each component to lubricate.

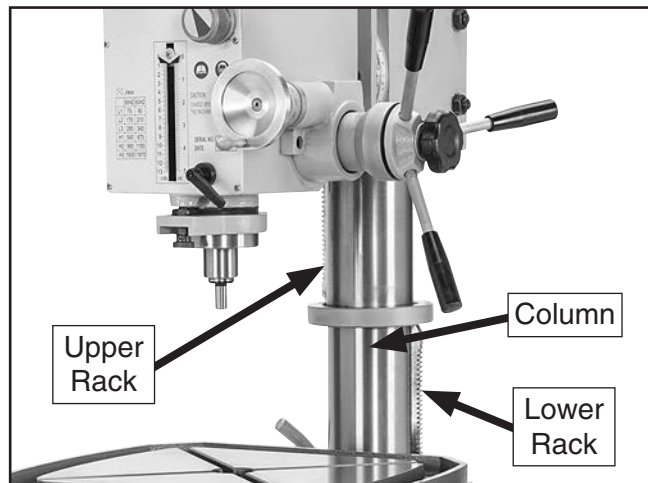


Figure 41. Column and racks.

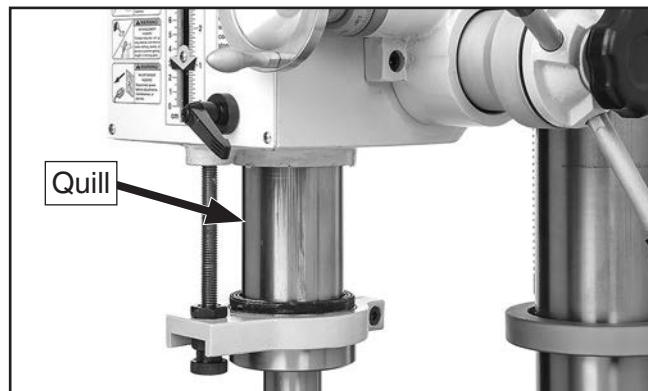


Figure 42. Outside surface of quill.

Use the component controls to access all surfaces, then clean them with mineral spirits, shop rags, and, where appropriate, brushes.

When dry, apply a thin coat of oil to the surfaces. Use clean brushes to apply oil to the grooves of the column rack. Move each component through the entire path of travel several times to distribute the lubricant.

Note: Take care not to remove the quill rack grease without re-applying it.

Quill Rack & Pinion

Oil TypeNLGI#2 Grease or Equivalent
Oil Amount.....Thin Coat
Lubrication Frequency90 Hrs. of Operation

Move the quill up and down to gain full access to the quill rack and pinion (see **Figure 43**), then clean the teeth with mineral spirits, shop rags, and a brush.

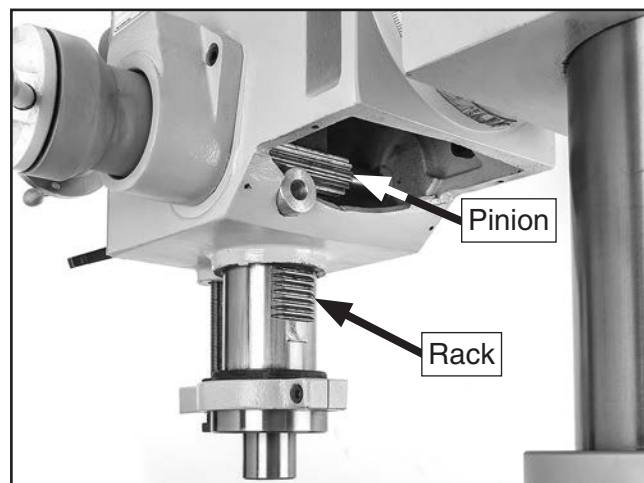


Figure 43. Quill rack and pinion.

When dry, use a brush to apply a thin coat of grease to the teeth, then raise/lower the quill several times to distribute the grease.

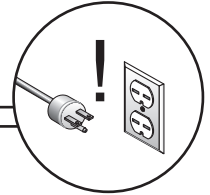
Note: Re-apply oil to the quill smooth outside surface that was removed during the cleaning process.



SECTION 7: SERVICE

Review the troubleshooting and procedures in this section if a problem develops with your machine. If you need replacement parts or additional help with a procedure, call our Technical Support. **Note:** *Please gather the serial number and manufacture date of your machine before calling.*

Troubleshooting

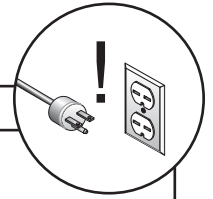


Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	<ol style="list-style-type: none"> 1. Incorrect power supply voltage or incoming wire connections. 2. Power supply circuit breaker tripped or fuse blown. 3. Motor wires connected incorrectly. 4. Wiring open/has high resistance. 5. Start capacitor at fault. 6. Spindle rotation switch at fault. 7. Centrifugal switch/contact points at fault. 8. Motor at fault. 	<ol style="list-style-type: none"> 1. Ensure correct power supply voltage and incoming wire connections. 2. Ensure circuit is sized correctly and free of shorts. Reset circuit breaker or replace fuse. 3. Correct motor wiring connections. 4. Check/fix broken, disconnected, or corroded wires. 5. Test/replace. 6. Test/replace switch. 7. Adjust/replace centrifugal switch/contact points if available. 8. Test/repair/replace.
Machine stalls or is underpowered.	<ol style="list-style-type: none"> 1. Machine undersized for task. 2. Wrong workpiece material (metal). 3. Motor overheated. 4. Motor wired incorrectly. 5. Plug/receptacle at fault. 6. Gearbox at fault. 7. Run capacitor at fault. 8. Centrifugal switch/contact points at fault. 9. Motor bearings at fault. 10. Spindle rotation switch at fault. 	<ol style="list-style-type: none"> 1. Use correct cutter/bit; reduce feed rate; reduce spindle RPM; use coolant if possible. 2. Use correct type/size of metal. 3. Clean motor, let cool, and reduce workload. 4. Wire motor correctly. 5. Test for good contacts/correct wiring. 6. Select appropriate gear ratio; replace broken or slipping gears. 7. Test/repair/replace. 8. Adjust/replace centrifugal switch or contact plate. 9. Test/repair/replace. 10. Test/replace switch.
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> 1. Motor or component loose. 2. Chuck or cutter at fault. 3. Motor fan rubbing on fan cover. 4. Motor mount loose/broken. 5. Machine incorrectly mounted/secured to floor. 6. Motor or spindle bearings at fault. 7. Centrifugal switch is at fault. 	<ol style="list-style-type: none"> 1. Inspect/replace damaged bolts/nuts, and retighten with thread locking fluid. 2. Replace unbalanced chuck; replace/resharpen cutter; use correct feed rate. 3. Fix/replace fan cover; replace loose/damaged fan. 4. Tighten/replace. 5. Tighten mounting bolts; relocate/shim machine. 6. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. 7. Replace.



Drill Press Operations

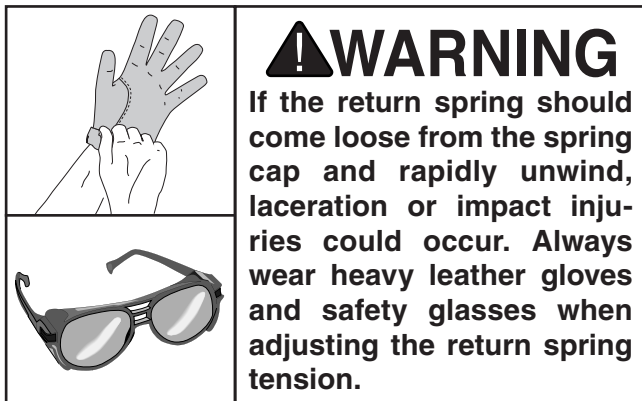


Symptom	Possible Cause	Possible Solution
Tool loose in spindle.	<ol style="list-style-type: none"> 1. Tool is not fully drawn up into spindle taper. 2. Debris on tool or in spindle taper 3. Taking too big of a cut. 	<ol style="list-style-type: none"> 1. Tighten drawbar. 2. Clean tool and spindle taper. 3. Lessen depth of cut and allow chips to clear.
Breaking tools.	<ol style="list-style-type: none"> 1. Spindle speed/feed rate is too fast. 2. Tool is too small. 3. Tool getting too hot. 4. Taking too big of a cut. 5. Spindle extended too far down. 	<ol style="list-style-type: none"> 1. Set spindle speed correctly or use slower feed rate (Page 25). 2. Use larger tool. 3. Use coolant or oil for appropriate application. 4. Lessen depth of cut and allow chips to clear. 5. Fully retract spindle and lower headstock. This increases rigidity (Page 21).
Workpiece or tool vibrates or chatters during operation.	<ol style="list-style-type: none"> 1. Table locks not tight. 2. Workpiece not secure. 3. Spindle speed/feed rate is too fast. 4. Spindle or quill extended too far down. 5. Quill lock lever not tight. 	<ol style="list-style-type: none"> 1. Tighten table locks (Page 20). 2. Properly clamp workpiece on table. 3. Set spindle speed correctly (Page 25). 4. Fully retract spindle and lower headstock. This increases rigidity (Page 21). 5. Tighten quill lock lever (Page 24).
Table is hard to move.	<ol style="list-style-type: none"> 1. Chips have loaded up on rack and pinion. 	<ol style="list-style-type: none"> 1. Frequently clean away chips that load up during operations.
Headstock is hard to raise.	<ol style="list-style-type: none"> 1. Headstock lock nuts at fault. 2. Rack and pinion at fault or jammed with grime/debris. 	<ol style="list-style-type: none"> 1. Loosen/replace lock nuts. 2. Fix/replace broken or loose parts; clean and lubricate rack and pinion.
Bad surface finish.	<ol style="list-style-type: none"> 1. Spindle speed is too fast. 2. Dull or incorrect cutting tool. 3. Wrong rotation of cutting tool. 4. Workpiece not secure. 5. Spindle extended too far down. 	<ol style="list-style-type: none"> 1. Set spindle speed correctly (Page 25). 2. Sharpen cutting tool or select one that better suits the operation. 3. Check for proper cutting tool rotation. 4. Properly clamp workpiece on table. 5. Fully retract spindle and lower headstock. This increases rigidity (Page 21).
Spindle overheats.	<ol style="list-style-type: none"> 1. Drill operated at high speeds for extended period. 	<ol style="list-style-type: none"> 1. Allow drill to cool.
Spindle does not return to highest position.	<ol style="list-style-type: none"> 1. Poorly adjusted return spring. 2. Worn return spring. 	<ol style="list-style-type: none"> 1. Increase return spring tension (Page 36). 2. Replace return spring.
Depth stop producing inaccurate results.	<ol style="list-style-type: none"> 1. Depth stop not calibrated. 	<ol style="list-style-type: none"> 1. Calibrate depth stop (Page 36).



Tensioning Return Spring

The spring tension for automatic quill recoil has been pre-set at the factory. It should not need adjustment under most normal circumstances. If it does need adjustment, the spring housing is located on the left side of the headstock.



To adjust spring tension:

1. DISCONNECT MACHINE FROM POWER!
2. PUT ON SAFETY GLASSES!
3. Loosen thumb knob shown in **Figure 44** 2–3 turns (DO NOT completely remove thumb knob).

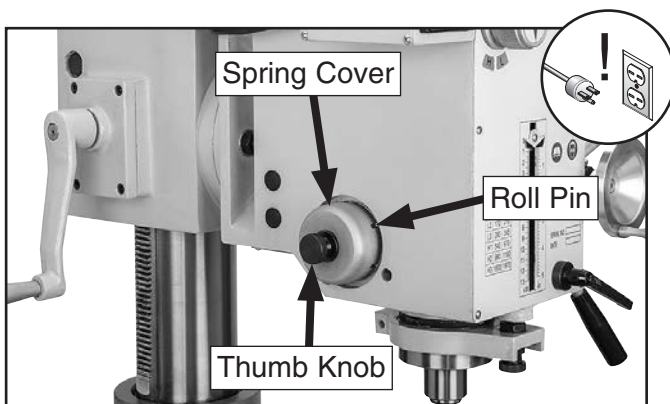


Figure 44. Spring tension components.

4. Wearing gloves, pull spring cover (**Figure 45**) out enough so notches just clear roll pin. HOLD SPRING COVER TIGHTLY during this step, or force of spring will cause cover to spin out of your hands.

5. Rotate cover counterclockwise to increase tension, then push cover back in to engage roll pin with one of the notches, as shown in **Figure 45**, then retighten thumb knob.



Figure 45. Example of adjusting spring tension by rotating spring cover to engage next notch with roll pin.

Calibrating Depth Stop

The depth stop can be calibrated to improve accuracy. Make sure the spindle is retracted all the way into the quill, then follow the steps below.

To calibrate depth stop:

1. Lower depth stop (see **Figure 46**) until pointer reaches bottom of its travel.
2. Loosen button head cap screw shown in **Figure 46**, and position pointer so its upper edge aligns with zero, then re-tighten screw.

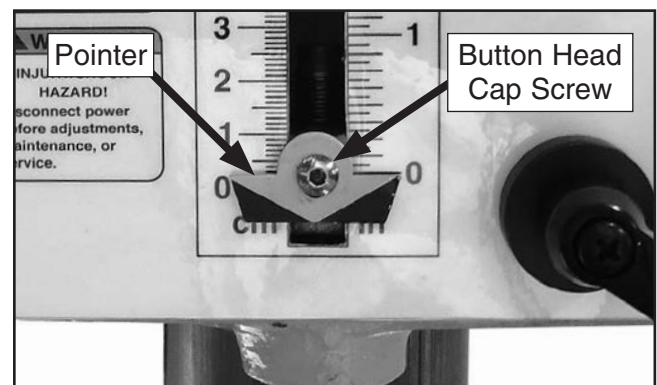


Figure 46. Calibrating depth stop.



SECTION 8: WIRING

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Compare the manufacture date of your machine to the one stated in this manual, and study this section carefully.

If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance BEFORE making any changes to the wiring on your machine. An updated wiring diagram may be available. **Note:** *Please gather the serial number and manufacture date of your machine before calling. This information can be found on the main machine label.*

WARNING

Wiring Safety Instructions

SHOCK HAZARD. Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!

MODIFICATIONS. Modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire. This includes the installation of unapproved after-market parts.

WIRE CONNECTIONS. All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.

CIRCUIT REQUIREMENTS. You MUST follow the requirements at the beginning of this manual when connecting your machine to a power source.

WIRE/COMPONENT DAMAGE. Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components.

MOTOR WIRING. The motor wiring shown in these diagrams is current at the time of printing but may not match your machine. If you find this to be the case, use the wiring diagram inside the motor junction box.











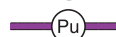

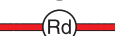

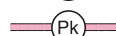
CAPACITORS/INVERTERS. Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

EXPERIENCING DIFFICULTIES. If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.

NOTICE

The photos and diagrams included in this section are best viewed in color. You can view these pages in color at www.grizzly.com.

COLOR KEY

BLACK 	BLUE 	YELLOW 	LIGHT BLUE 
WHITE 	BROWN 	YELLOW GREEN 	BLUE WHITE 
GREEN 	GRAY 	PURPLE 	TURQUOISE 
RED 	ORANGE 	PINK 	



Electrical Components

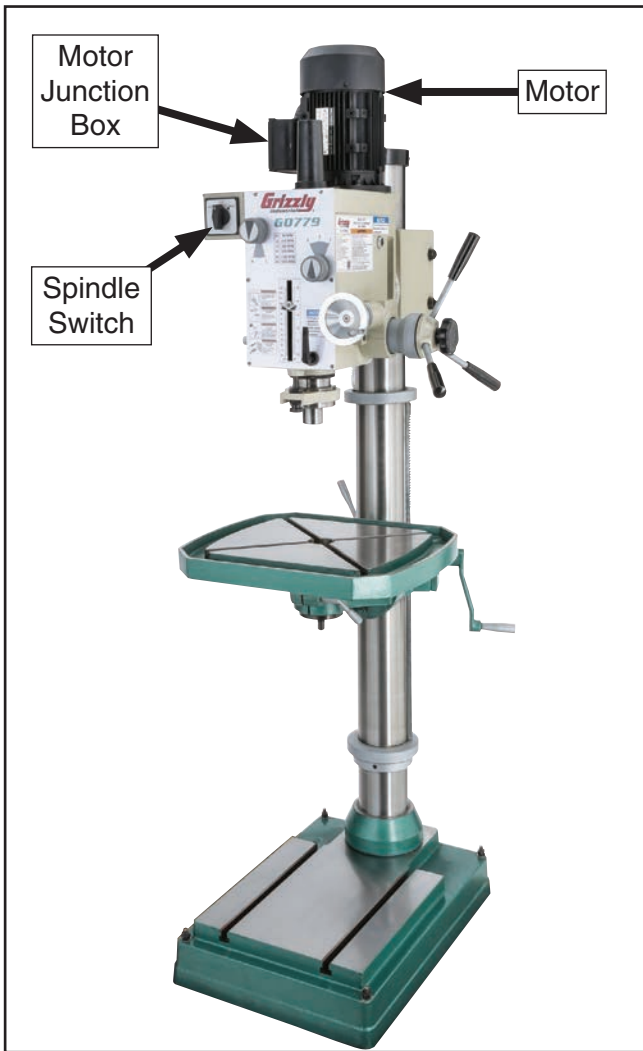


Figure 47. Electrical component wiring overview.



Figure 48. Motor junction box wiring.

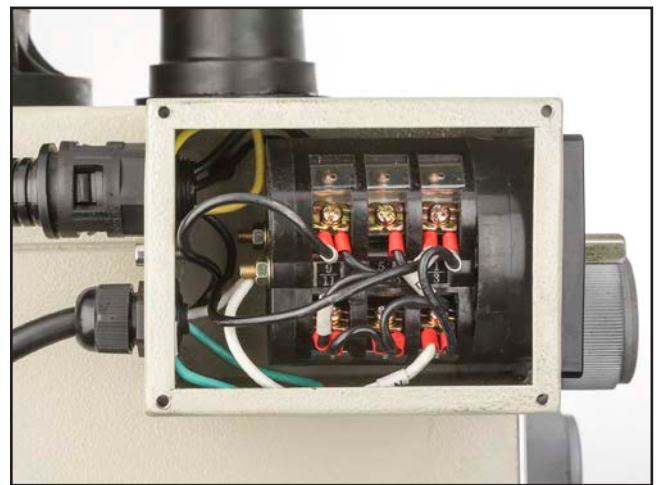
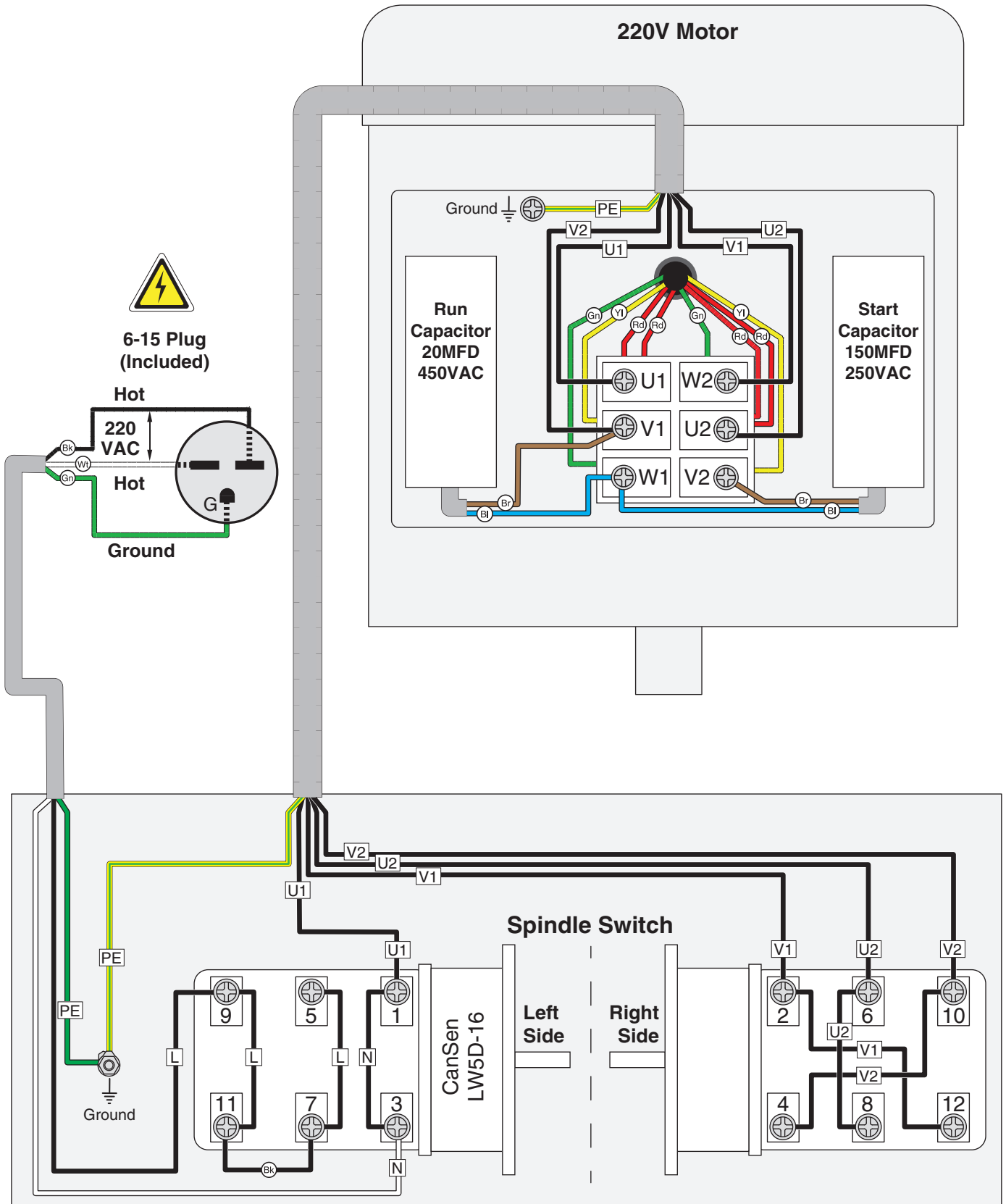


Figure 49. Switch box wiring.



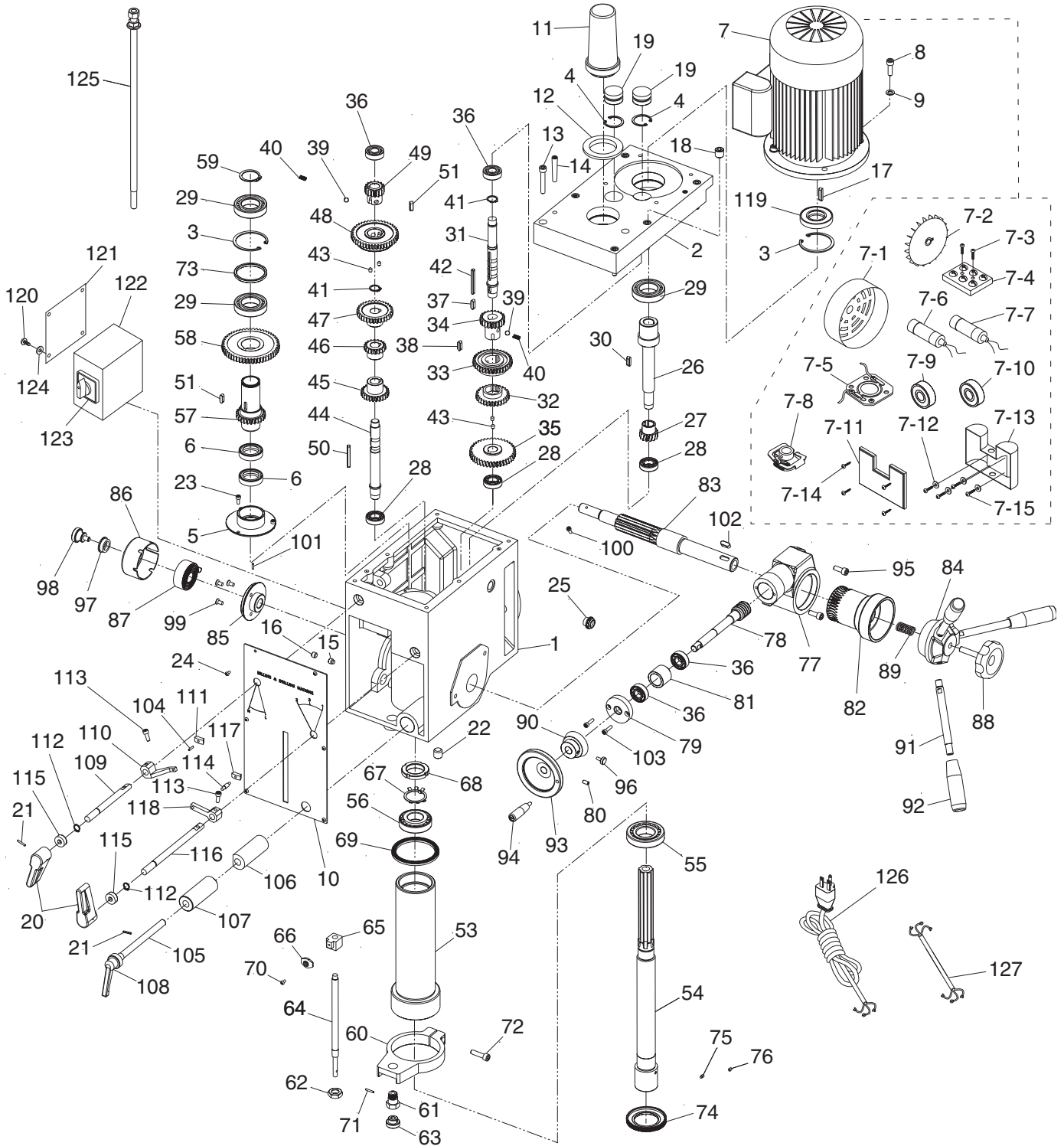
Wiring Diagram



SECTION 9: PARTS

We do our best to stock replacement parts when possible, but we cannot guarantee that all parts shown are available for purchase. Call (800) 523-4777 or visit www.grizzly.com/parts to check for availability.

Headstock



Headstock Parts List

REF PART #	DESCRIPTION
1	P0779001 HEADSTOCK CASTING
2	P0779002 HEADSTOCK COVER
3	P0779003 INT RETAINING RING 62MM
4	P0779004 INT RETAINING RING 35MM
5	P0779005 FLANGED END CAP
6	P0779006 OIL SEAL 45 X 35 X 10MM
7	P0779007 MOTOR 2HP 220V 1-PH
7-1	P0779007-1 MOTOR FAN COVER
7-2	P0779007-2 MOTOR FAN
7-3	P0779007-3 PHLP HD SCR M4-.7 X 16
7-4	P0779007-4 MOTOR TERMINAL BLOCK
7-5	P0779007-5 CONTACT PLATE
7-6	P0779007-6 S CAPACITOR 150M 250V 1-5/8 X 3
7-7	P0779007-7 R CAPACITOR 20M 450V 1-5/8 X 3-1/4
7-8	P0779007-8 CENTRIFUGAL SWITCH
7-9	P0779007-9 BALL BEARING 6205ZZ (FRONT)
7-10	P0779007-10 BALL BEARING 6205ZZ (REAR)
7-11	P0779007-11 CAPACITOR BOX COVER
7-12	P0779007-12 FLAT WASHER 4MM
7-13	P0779007-13 CAPACITOR BOX
7-14	P0779007-14 TAP SCREW M3-.5 X 10
7-15	P0779007-15 PHLP HD SCR M4-.7 X 10
8	P0779008 CAP SCREW M8-1.25 X 25
9	P0779009 FLAT WASHER 8MM
10	P0779010 HEADSTOCK FACE PLATE
11	P0779011 DRAWBAR CAP
12	P0779012 DRAWBAR CAP RUBBER SEAL
13	P0779013 CAP SCREW M8-1.25 X 45
14	P0779014 TAPER PIN 8 X 40
15	P0779015 SET SCREW M10-1.5 X 10 DOG-PT
16	P0779016 SET SCREW M10-1.5 X 8
17	P0779017 KEY 6 X 6 X 28
18	P0779018 OIL FILL PLUG 3/8"
19	P0779019 HEADSTOCK COVER PLUG
20	P0779020 SPINDLE SPEED LEVER
21	P0779021 ROLL PIN 3 X 18
22	P0779022 OIL DRAIN PLUG 3/8"
23	P0779023 CAP SCREW M5-.8 X 10
24	P0779024 BUTTON HD CAP SCR M4-.7 X 8
25	P0779025 OIL SIGHT GLASS M18-1.5
26	P0779026 DRIVE SHAFT
27	P0779027 GEAR 14T
28	P0779028 BALL BEARING 6003ZZ
29	P0779029 BALL BEARING 6007ZZ
30	P0779030 KEY 5 X 5 X 25
31	P0779031 IDLER SHAFT
32	P0779032 GEAR 29T
33	P0779033 GEAR 35T
34	P0779034 GEAR 21T

REF PART #	DESCRIPTION
35	P0779035 GEAR 41T
36	P0779036 BALL BEARING 6202ZZ
37	P0779037 KEY 6 X 6 X 14
38	P0779038 KEY 6 X 6 X 28
39	P0779039 STEEL BALL 8MM
40	P0779040 COMPRESSION SPRING
41	P0779041 EXT RETAINING RING 18MM
42	P0779042 KEY 5 X 5 X 50
43	P0779043 SET SCREW M6-1 X 12
44	P0779044 SPINDLE SHAFT
45	P0779045 GEAR 25T
46	P0779046 GEAR 18T
47	P0779047 GEAR 32T
48	P0779048 GEAR 43T
49	P0779049 GEAR 16T
50	P0779050 KEY 5 X 5 X 50
51	P0779051 KEY 6 X 6 X 18
53	P0779053 QUILL
54	P0779054 SPINDLE
55	P0779055 TAPERED ROLLER BEARING 30207 P5
56	P0779056 TAPERED ROLLER BEARING 30206 P5
57	P0779057 SPLINED SLEEVE
58	P0779058 GEAR 53T
59	P0779059 EXT RETAINING RING 35MM
60	P0779060 DEPTH ROD MOUNT
61	P0779061 CYLINDRICAL BOLT M16-2 X 10
62	P0779062 HEX NUT M16-2 THIN
63	P0779063 DEPTH ROD KNURLED KNOB
64	P0779064 DEPTH ROD
65	P0779065 DEPTH ROD STOP BLOCK
66	P0779066 DEPTH POINTER
67	P0779067 LOCK WASHER 30MM
68	P0779068 SPANNER NUT M30-1.5
69	P0779069 QUILL SEAL (RUBBER)
70	P0779070 BUTTON HD CAP SCR M4-.7 X 8
71	P0779071 ROLL PIN 3 X 18
72	P0779072 CAP SCREW M8-1.25 X 30
73	P0779073 SPACER
74	P0779074 SPINDLE END CAP
75	P0779075 SET SCREW M5-.8 X 6
76	P0779076 SET SCREW M5-.8 X 4
77	P0779077 WORM GEAR HOUSING
78	P0779078 WORM SHAFT
79	P0779079 WORM SHAFT END BRACKET
80	P0779080 SET SCREW M6-1 X 12
81	P0779081 SPACER
82	P0779082 WORM GEAR
83	P0779083 PINION SHAFT
84	P0779084 LEVER HUB



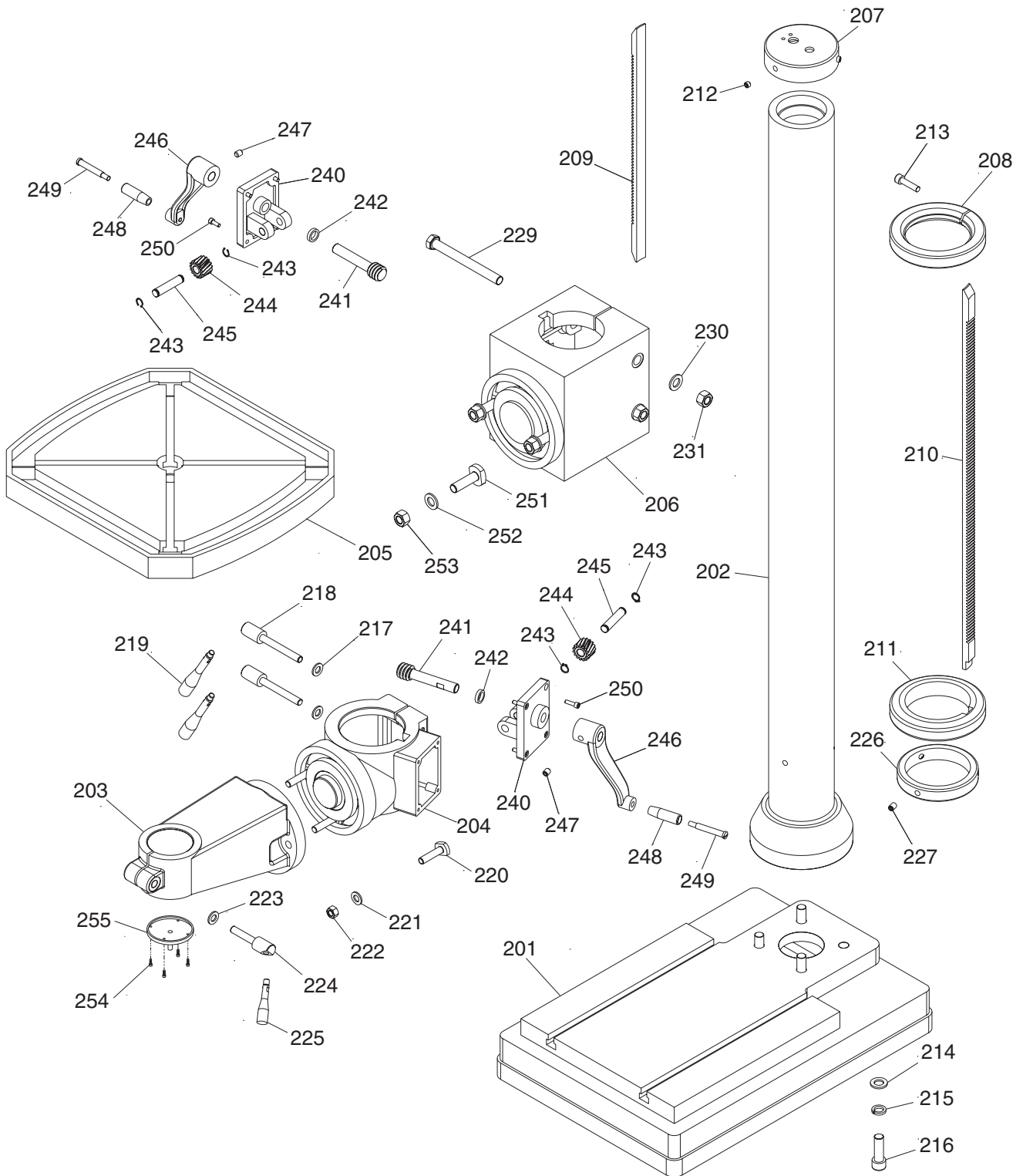
Headstock Parts List (Cont.)

REF	PART #	DESCRIPTION
85	P0779085	SPRING BASE
86	P0779086	SPRING COVER
87	P0779087	FLAT COILED SPRING
88	P0779088	KNOB BOLT M10-1.5 X 45
89	P0779089	COMPRESSION SPRING
90	P0779090	FINE DOWNFEED GRADUATED DIAL
91	P0779091	STUD-UDE M12-1.75 X 145, 15, 20
92	P0779092	TAPERED HANDLE M12-1.75, 98L
93	P0779093	HANDWHEEL 100MM DIA.
94	P0779094	HANDWHEEL HANDLE M6-1 X 10, 65L
95	P0779095	CAP SCREW M8-1.25 X 25
96	P0779096	KNURLED THUMB SCREW M5-.8 X 12
97	P0779097	KNOB BUSHING
98	P0779098	KNURLED THUMB SCREW M8-1.25 X 12
99	P0779099	FLAT HD CAP SCR M6-1 X 12
100	P0779100	PHLP HD SCR M5-.8 X 12
101	P0779101	DOWEL PIN 3 X 12
102	P0779102	KEY 8 X 8 X 20
103	P0779103	CAP SCREW M5-.8 X 20
104	P0779104	ROLL PIN 3 X 15
105	P0779105	LOCK LEVER SHAFT
106	P0779106	INSIDE LOCK PLUNGER

REF	PART #	DESCRIPTION
107	P0779107	OUTSIDE LOCK PLUNGER
108	P0779108	ADJUSTABLE HANDLE
109	P0779109	SPEED RANGE SHIFT SHAFT
110	P0779110	SPEED RANGE SHIFT LEVER
111	P0779111	SPEED RANGE SHIFT FORK
112	P0779112	EXT RETAINING RING 12MM
113	P0779113	CAP SCREW M6-1 X 14
114	P0779114	SHIFT ROD
115	P0779115	OIL SEAL 12 X 22 X 8
116	P0779116	SPEED SHIFT SHAFT
117	P0779117	SPEED SHIFT FORK
118	P0779118	SPEED SHIFT LEVER
119	P0779119	OIL SEAL 35 X 62 X 10
120	P0779120	PHLP HD SCR M4-.7 X 6
121	P0779121	SWITCH BOX COVER
122	P0779122	SWITCH BOX
123	P0779123	ROTARY SWITCH (LEFT, STOP, RIGHT)
124	P0779124	FLAT WASHER 4MM
125	P0779125	DRAWBAR 7/16-20
126	P0779126	POWER CORD 14G 3W 80" 6-15
127	P0779127	MOTOR CORD 14G 3W 12"



Column



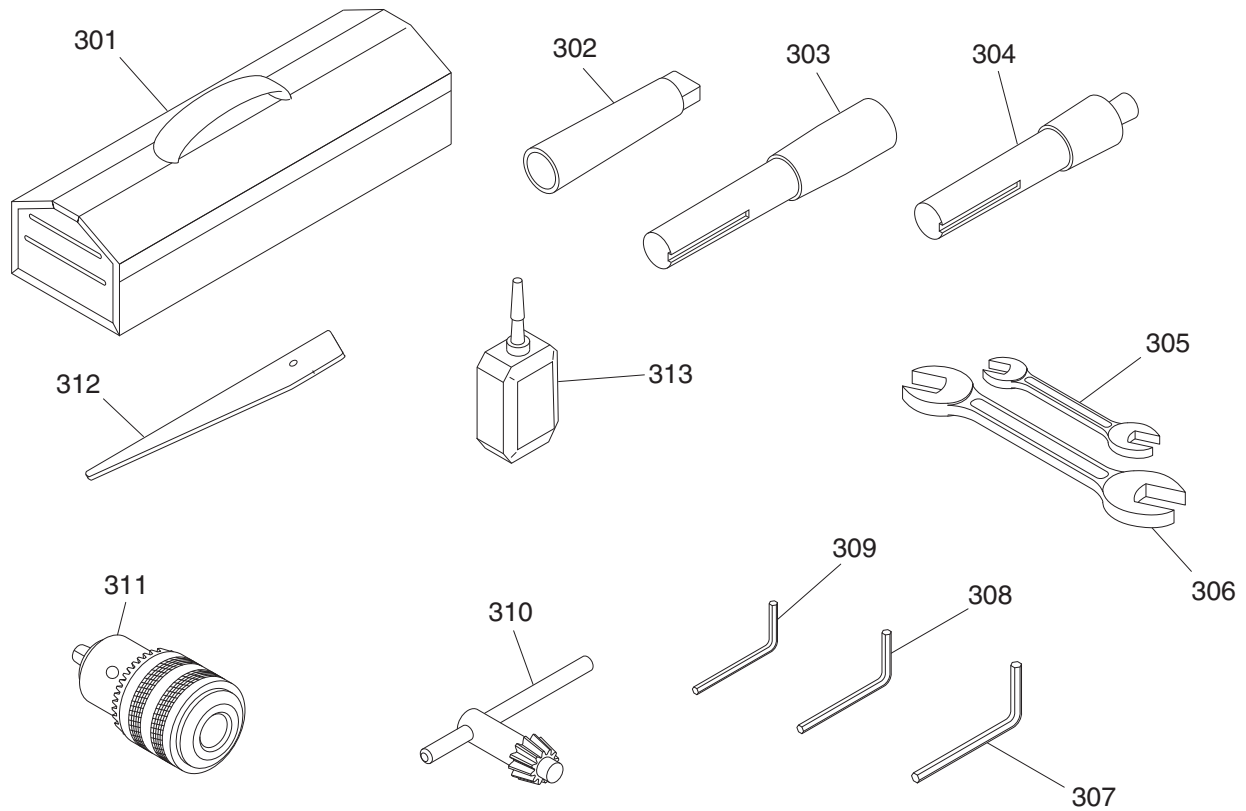
Column Parts List

REF	PART #	DESCRIPTION
201	P0779201	BASE
202	P0779202	COLUMN
203	P0779203	TABLE ARM BRACKET
204	P0779204	TABLE BRACKET
205	P0779205	TABLE
206	P0779206	HEAD ELEVATION GEAR HOUSING
207	P0779207	COLUMN CAP
208	P0779208	RACK GUIDE RING
209	P0779209	RACK (HEAD ELEVATION)
210	P0779210	RACK (TABLE ELEVATION)
211	P0779211	RACK RING
212	P0779212	SET SCREW M10-1.5 X 10
213	P0779213	CAP SCREW M10-1.5 X 40
214	P0779214	FLAT WASHER 16MM
215	P0779215	LOCK WASHER 16MM
216	P0779216	HEX BOLT M16-2 X 50
217	P0779217	FLAT WASHER 12MM
218	P0779218	TABLE LOCK HUB M12-1.75 X 95
219	P0779219	TABLE LOCK HANDLE M10-1.5 X 12, 115L
220	P0779220	T-BOLT M12-1.75 X 45
221	P0779221	FLAT WASHER 12MM
222	P0779222	HEX NUT M12-1.75
223	P0779223	FLAT WASHER 12MM

REF	PART #	DESCRIPTION
224	P0779224	PIVOT LOCK HUB M12-1.75 X 60
225	P0779225	LEVER HANDLE M10-1.5 X 8, 75L
226	P0779226	RACK RING BASE
227	P0779227	SET SCREW M10-1.5 X 16
229	P0779229	HEX BOLT M16-2 X 190
230	P0779230	FLAT WASHER 16MM
231	P0779231	HEX NUT M16-2
240	P0779240	ELEVATION CRANK BRACKET
241	P0779241	WORM GEAR
242	P0779242	SPACER
243	P0779243	EXT RETAINING RING 14MM
244	P0779244	HELICAL GEAR 15T
245	P0779245	SHAFT
246	P0779246	ELEVATION CRANK
247	P0779247	SET SCREW M10-1.5 X 12
248	P0779248	CRANK HANDLE 75MM
249	P0779249	SHOULDER SCREW M10-1.5 X 10, 12 X 68
250	P0779250	CAP SCREW M6-1 X 20
251	P0779251	T-BOLT M14-2 X 55
252	P0779252	FLAT WASHER 14MM
253	P0779253	HEX NUT M14-2
254	P0779254	CAP SCREW M6-1 X 12
255	P0779255	COOLANT DRAIN



Accessories

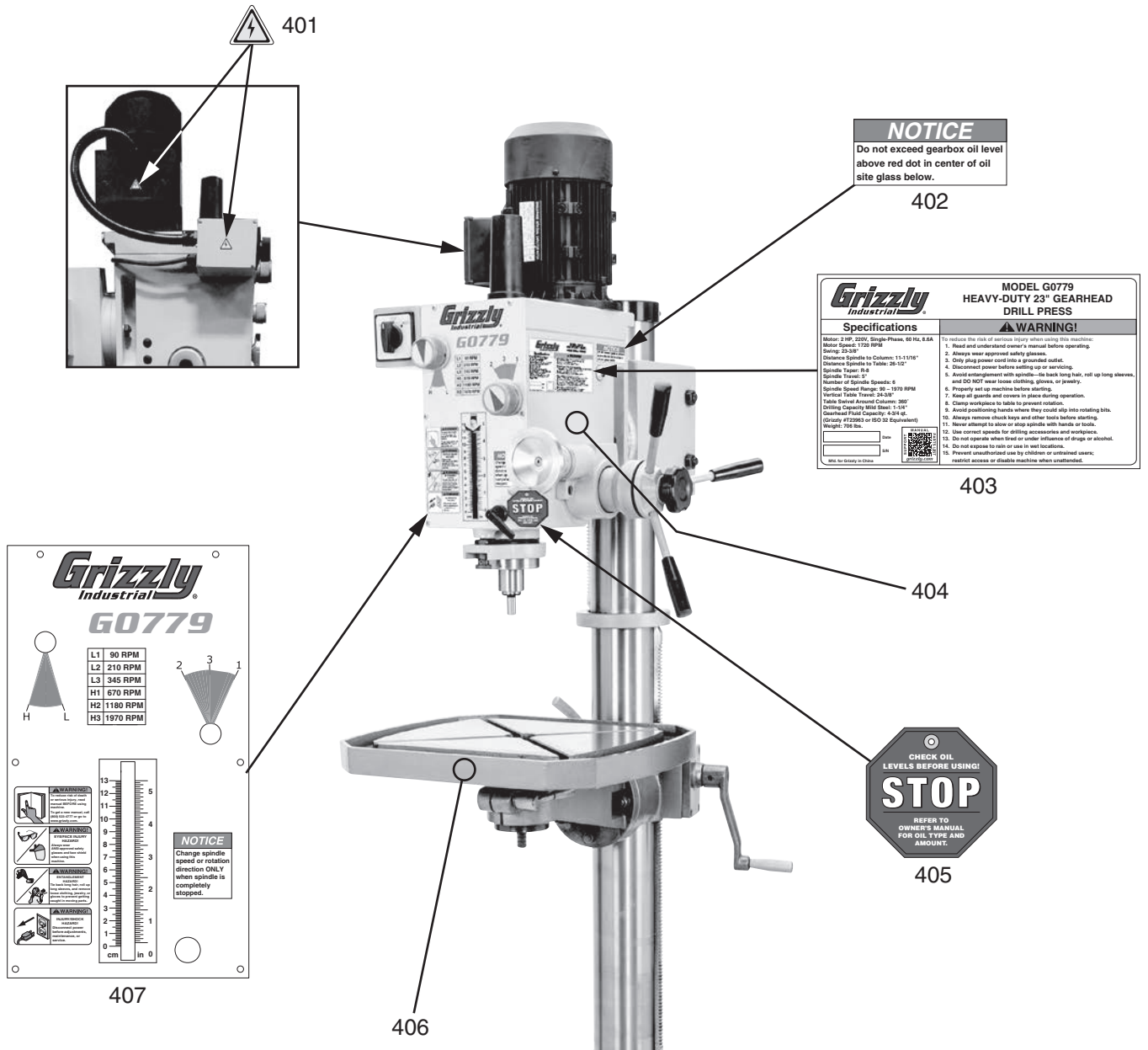


REF	PART #	DESCRIPTION
301	P0779301	TOOLBOX
302	P0779302	SPINDLE ADAPTER MT3-MT2
303	P0779303	SPINDLE SLEEVE R8-MT3
304	P0779304	DRILL CHUCK ARBOR R8-B16
305	P0779305	WRENCH 17 X 19MM OPEN-ENDS
306	P0779306	WRENCH 22 X 24MM OPEN-ENDS
307	P0779307	HEX WRENCH 5MM

REF	PART #	DESCRIPTION
308	P0779308	HEX WRENCH 4MM
309	P0779309	HEX WRENCH 3MM
310	P0779310	DRILL CHUCK KEY 5/16" STD 11T SD-5/8"
311	P0779311	DRILL CHUCK 1-13MM B16
312	P0779312	DRIFT KEY
313	P0779313	BOTTLE FOR OIL



Labels



REF	PART #	DESCRIPTION
401	P0779401	ELECTRICITY LABEL
402	P0779402	GEARBOX OIL LEVEL NOTICE
403	P0779403	MACHINE ID LABEL
404	P0779404	GRIZZLY BEIGE TOUCH-UP PAINT

REF	PART #	DESCRIPTION
405	P0779405	CHECK OIL LABEL
406	P0779406	GRIZZLY GREEN TOUCH-UP PAINT
407	P0779407	CONTROLS/WARNING LABEL

⚠ WARNING

Safety labels help reduce the risk of serious injury caused by machine hazards. If any label comes off or becomes unreadable, the owner of this machine **MUST** replace it in the original location before resuming operations. For replacements, contact (800) 523-4777 or www.grizzly.com.





WARRANTY CARD

Name _____
 Street _____
 City _____ State _____ Zip _____
 Phone # _____ Email _____
 Model # _____ Order # _____ Serial # _____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. **Of course, all information is strictly confidential.**

1. How did you learn about us?

Advertisement Friend Catalog
 Card Deck Website Other:

2. Which of the following magazines do you subscribe to?

<input type="checkbox"/> Cabinetmaker & FDM	<input type="checkbox"/> Popular Science	<input type="checkbox"/> Wooden Boat
<input type="checkbox"/> Family Handyman	<input type="checkbox"/> Popular Woodworking	<input type="checkbox"/> Woodshop News
<input type="checkbox"/> Hand Loader	<input type="checkbox"/> Precision Shooter	<input type="checkbox"/> Woodsmith
<input type="checkbox"/> Handy	<input type="checkbox"/> Projects in Metal	<input type="checkbox"/> Woodwork
<input type="checkbox"/> Home Shop Machinist	<input type="checkbox"/> RC Modeler	<input type="checkbox"/> Woodworker West
<input type="checkbox"/> Journal of Light Cont.	<input type="checkbox"/> Rifle	<input type="checkbox"/> Woodworker's Journal
<input type="checkbox"/> Live Steam	<input type="checkbox"/> Shop Notes	<input type="checkbox"/> Other:
<input type="checkbox"/> Model Airplane News	<input type="checkbox"/> Shotgun News	
<input type="checkbox"/> Old House Journal	<input type="checkbox"/> Today's Homeowner	
<input type="checkbox"/> Popular Mechanics	<input type="checkbox"/> Wood	

3. What is your annual household income?

\$20,000-\$29,000 \$30,000-\$39,000 \$40,000-\$49,000
 \$50,000-\$59,000 \$60,000-\$69,000 \$70,000+

4. What is your age group?

20-29 30-39 40-49
 50-59 60-69 70+

5. How long have you been a woodworker/metalworker?

0-2 Years 2-8 Years 8-20 Years 20+ Years

6. How many of your machines or tools are Grizzly?

0-2 3-5 6-9 10+

7. Do you think your machine represents a good value? Yes No

8. Would you recommend Grizzly Industrial to a friend? Yes No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?

Note: We never use names more than 3 times. Yes No

10. Comments: _____

CUT ALONG DOTTED LINE

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Place
Stamp
Here



GRIZZLY INDUSTRIAL, INC.
P.O. BOX 2069
BELLINGHAM, WA 98227-2069



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Send a Grizzly Catalog to a friend:

Name _____
Street _____
City _____ State _____ Zip _____

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WARRANTY & RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

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